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SISTAS—Go-19

8 DEC 1952 MADRAS

The Second Line of Defence

By SHRI SRI PRAKASA, Governor of Madras

Fellow-citizens !

Freedom entails heavy responsibilities on all who value it, and desire to retain it. It is indeed a joy to be free ; but the joy would be short-lived and turn to bitter despair and utter frustration, if the Freedom that gives it, is itself lost. Constituted as the world is, it is the path of wisdom to be prepared for all emergencies, for verily to be forewarned is to be fore-armed. Our Freedom is of very recent birth ; and it behoves us all to endeavour our utmost to keep it inviolate in every way and for all time. The Government and the people are not different, but one and the same in a country that has declared itself a Sovereign Democratic Republic, for the Government is as the people make it ; and does only what the people want. No one can, in a set-up like ours, therefore, divest himself of his duty by the State and Society, whether he is a private citizen or Government official.

We as citizens of the land, in whatever sphere of activity we might be engaged, have our own importance in the scheme of things ; and we have all our definite parts to play for the maintenance of the Freedom that we have won. In a world where there is so much conflict, and where unfortunately many an issue is still decided by the successful use of physical force, every nation has to take steps to protect itself both against possible aggression from outside and from disturbance within. Any faltering and failing in this behalf endangers the stability of the State and the safety of the citizens. There is, of course, the regular Army that stands at its posts of duty in different parts of the country and at all strategic points, so that whenever the call should come, whenever the need should arise, it would be available to fulfil its task even if it involves—as it, in the very nature of things, does involve—the supremest sacrifice that man can make, namely, the giving up of his life so that others might be saved.

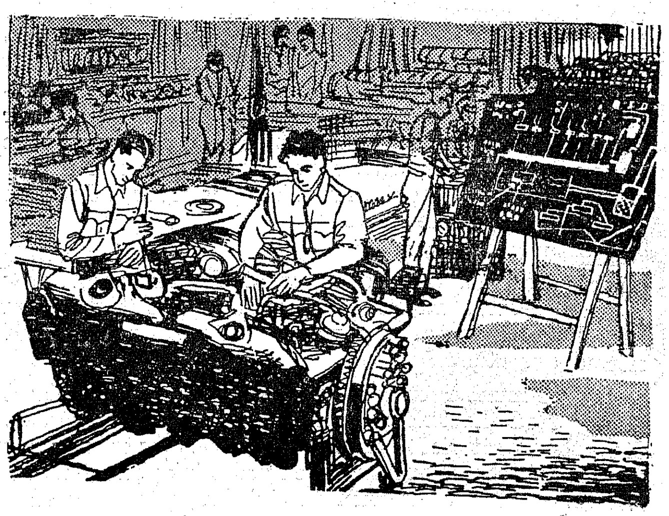
Role of the Territorial Army

This, however, is obviously not enough. A poor country like ours cannot possibly maintain a huge permanent standing Army commensurate to our needs. The burden will be too heavy. Already there is a feeling in many minds that the amounts put on our Armed Forces is extravagantly high, and that it should be very greatly curtailed, so that nation-building activities might have a chance. These, in their turn, can only prosper when the country is free from all harm. That has got to be assured and ensured before and above everything else. All the same, it is not a practical proposition either, that a very large proportion of the population should take up the profession of arms as their life-long calling. A few may be attracted towards the Army as an avenue for their energies that serves the double purpose of protecting the country and giving the individual an honourable occupation. Vast masses of the people like to spend quiet, peaceful lives, in some civil employment or other ; and still when the Army is limited and the danger great, we have to be prepared for possible emergencies, both in the nature of civil commotion and outside attack. We have all to think of ways and means of being able to augment our Forces whenever need should arise, without disturbing more than is absolutely necessary, the even tenor of civil life.

The Territorial Army is the via media, the most feasible compromise, so that without putting undue burden on the public exchequer, and without causing any undue disturbance to individual lives, we might be able to raise appreciably large numbers of well-trained people, ready to jump to the rescue of the country and society as need might arise. The Territorial Army is in the nature of a second line of defence in a national emergency, coming to the assistance of the regular Army at moments of danger and difficulty. If such an occasion should arise, the Territorial Army, for one thing, relieves the regular Army of all commitments in regard to internal security. It makes itself responsible for anti-aircraft and coastal defence activities, and also supplies technical units to assist the regular forces when engaged in active war. It should be the object of all persons in whatever profession they might be, who are physically fit, to join this Force ; and by offering to do all they can for the defence of the country, to vindicate the Freedom that is theirs.

Opportunities of Military Training

The Territorial Army is open to all able-bodied persons of 18 to 35 years of age. There must be many a young and middle-aged man who wishes to have opportunities of military training ; he has got it here. The divisions of the Territorial Army are conveniently bifurcated in Provincial and Urban Units, representing rural areas and towns, respectively. This distinction is not made to signify that the men who come from the two areas are in any way different, one from the other ; but because this will facilitate the proper training of those who come from town and from country, according to their needs and temperaments. The Urban Units are required for work of a technical nature, and so if they come from industry and are skilled workers and technicians, they quickly learn to use modern mechanised equipment. Apart from the workmen, if the employer



Workshop Practice

goes in for military training, he would be enabled to lead a disciplined life himself; and by his example inspire others also to be efficient and responsible. As industry unfortunately forms the first target of the enemy's attack in modern warfare, those who are engaged in it should take steps to prepare themselves to defend it even more than others.

Industry apart, every department of national life is important, and every unit of the population has its significance; and all have got to be defended and so all must learn to defend themselves. It is a cruel and shameful fact that unlike wars of old that used to be confined to the combatants themselves while the tiller of the soil drove his plough unmolested in the neighbouring field, and the author wrote his books undisturbed in an adjoining house, today atom bombs destroy whole cities in a trice, killing hundreds of thousands of innocent women, children and old men, who in accordance with the code of honour of the earlier day, enjoyed immunity from all harm. Thus all citizens have necessarily to be always on the alert.

Call to Youth of the Country

The best defence being self-defence and the best form of help being self-help, I fervently hope that the clarion call of the President and our own Chief Minister, inaugurating the Territorial Army Week on November 9, 1952, will meet with ready and enthusiastic response from the men of our State; and that all who are entitled to do so will rush to join the good cause. They will receive proper physical training and without causing any interference to their professional work, come for such training only for short periods of the year and at stated and convenient intervals. They will receive emoluments while under training on the same scale as men in the regular Army, grade for grade.

They will learn discipline; they will be indirectly but effectively taught the great and gentle art of leading happy and healthy lives, which will, in turn, enable them to regulate properly and well their own domestic and social situations and surroundings, and will give them that consciousness of self-esteem, self-reliance and self-confidence which alone can make us true citizens of a great and free country; and if, above all this, we are further filled with the fervent faith that we are actively engaged in the nation's defence, and are ever ready for the nation's service, such genuine joy and such justified pride will be ours as will make life worth living. May the appeal that this week stands for, attract tens of thousands of young men in our State of Madras, to join this great voluntary Army, and actively co-operate in the good cause, with all who love liberty and are determined ever to uphold it, unmindful of the price demanded!

Jai Hind!

(*A.I.R., Madras*)

Your Country Calls You

Join the Territorial Army

The Territorial Army is now three years old. During these three years, this Citizen Army, very much your own, has gained in strength and experience and the units that have been formed have received training which will enable them to take their place, when the time comes, in the country's defence. At ceremonial parades and at State functions, they have already made their mark.

From the very start, the Territorial Army has attracted men from all classes, creeds and communities, and they work together in the utmost harmony. While collectively they have shaped well as units with military training, individually they have added to their skill in and knowledge of various trades, thus improving their prospects in civil life; they have improved in health and the sense of discipline inculcated in them is an asset to them and their country. Whether they have joined as infantrymen or as engineers, signallers, drivers, wireless operators or in any other capacity, the gain immediately is theirs and will be of the country in the future.

And all that they have learnt or are learning has been in their spare time. For, let us repeat, the Territorial Army *does not* provide wholetime occupation, but it gives you useful part-time training without interfering with your normal avocations.

A large number of men from cities, towns and villages have joined the Territorial Army, but more are needed. Since the Territorial Army consists of all types of units you can always choose one for which you think you are fitted. Whatever your occupation in civil life, you will find a Territorial Army unit where your talents can be of value. We cannot all be whole-time soldiers, but we can certainly contribute our spare time to prepare for the defence of our country.

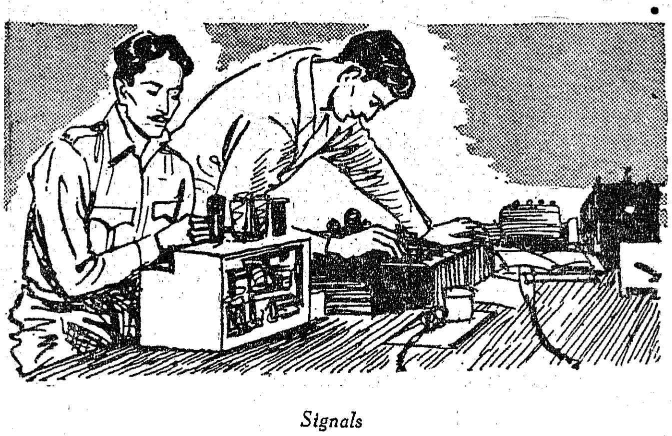
The Role of the Territorial Army

(1) To relieve the Regular Army of static duties and support the Civil Power if required.

(2) To provide coast defence and Anti-Aircraft Units.

(3) To provide field formations and units for the Regular Army if and when required.

If you have time to spare, there could be no better use for it than training in the Territorial Army.



Signals

Age.—All able-bodied persons from unskilled labourers to highly qualified technicians, between the ages of 18 and 35, are eligible for recruitment. The upper age-limit is relaxable in the case of ex-servicemen and civilians possessing technical qualifications.

Service liability.—You will not be required to perform military service beyond the limits of India except under a general or special order of the Central Government.

Recruiting zones.—For the purposes of recruitment, the country has been divided into eight zones. Join one of the units raised in your zone.

Types of units.—If you are a resident of a town or city, join an Urban Unit. If you hail from rural areas, take your place in a Provincial Unit. There is no difference in service conditions. Only the method of training varies so as to suit recruits joining either unit.

Training.—Training in the Territorial Army consists of—

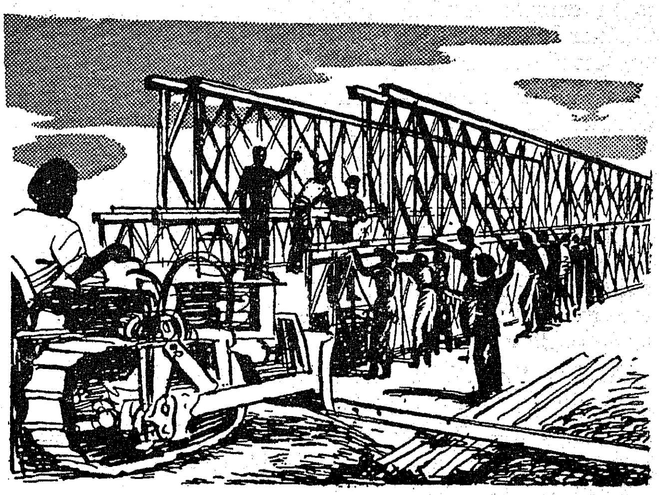
(*a*) Recruit Training and Annual Training.

(*b*) Voluntary Training on courses of instruction and attachment to Regular Army Units.

Recruit Training.—Provincial Units—30 days annually.

Urban Units—128 hours of drill annually to be undergone in the evening and at week-ends and holidays.

Exemption from Recruit Training may be given to ex-servicemen.

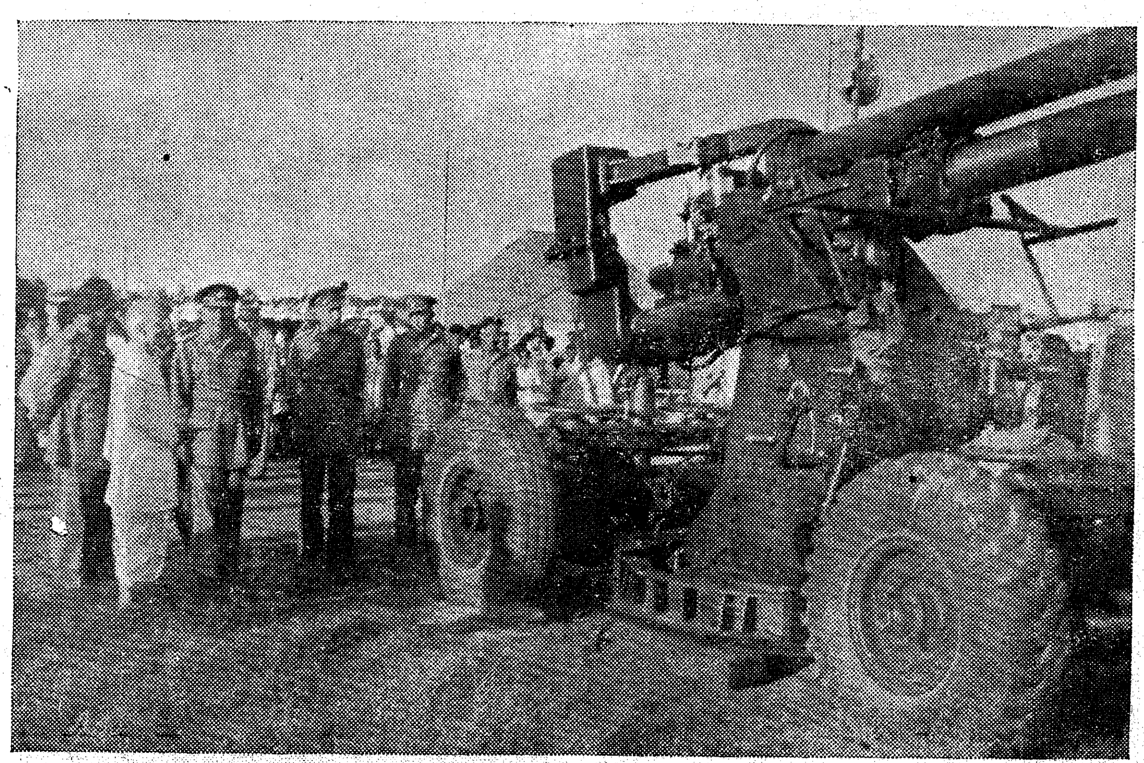


Bridge building

Annual Training.—Every person who has undergone or has been exempted from Recruit Training will undergo Annual Training as follows :—

(*a*) Provincial Units—For two calendar months annually.

(*b*) Urban Units—For a minimum of 120 hours of drill up to a maximum of 240 hours of drill per annum



TERRITORIAL ARMY WEEK : Sri C. Rajagopalachari, Chief Minister of Madras State, recently inaugurated the Third Territorial Army Week in Madras. Here General Mohite is seen explaining the mechanism of an anti-aircraft gun to the Chief Minister.

to be completed after working hours in the evenings at week-ends and holidays including an annual camp of not less than four days.

Pay and allowances.—You will receive the same pay and dearness allowance as are given to corresponding ranks of the Regular Army for every day of training or duty. In an Urban Unit, four hours of drill or instruction constitute one day for purposes of pay and allowances.

Clothing.—Other Ranks are issued with free clothing. The clothing will be replaced free of charge, when unserviceable. On commissioning, the Junior Commissioned Officers are given Rs. 200 and the Commissioned Officers Rs. 800 as an outfit allowance.

Rations for J.C.Os. and other Ranks.—When embodied for training, rations are free.

Travelling and conveyance allowance.—Travelling, daily and ration allowances are admissible at the same rates as for the Regular Army.

Method of applying (Other Ranks).—Forms for enrolment in the Territorial Army are available from Recruiting Officers throughout India and from Territorial Army Units. The forms for all categories of persons applying for enrolment will be normally completed by either the Unit or Recruiting staff. After the necessary verification, if the applicant is found fit in all respects, a medical examination will be carried out and enrolment completed. For Urban Units only persons residing in the town where the unit is being raised or its vicinity are eligible.

Commissions.—The number of commissions the Territorial Army can offer is necessarily limited. But if you join the Other Ranks, you stand a good chance of attaining a commissioned rank in the Territorial Army or the Regular Army.

Our Aim is Peace But......

The aim of India's national policy is the maintenance of peace but, at the same time, she cannot ignore the need for efficient defence. There is no time in an emergency to raise and train a large Army. Nor can a large Army be maintained all the time without straining national resources. The obvious alternative is to prepare now and have a reserve. If you join the Territorial Army you help to build up that reserve and—

* *YOU* serve your country in its hour of need.
* *YOU* give the Armed Forces much needed support.
* *YOU* maintain the morale of the people and ensure their security.
* *YOU* acquire habits of discipline and by your example help to make better citizens.
* *YOU* get opportunities to improve your technical skill by using up-to-date modern equipment and thus improve your prospects in civil life.
* *YOU* supplement your income with the Territorial Army pay and allowances which you get in your spare time.

RED CROSS PUBLICITY: Shri Sri Prakasa, Governor of Madras, recently presided over the publicity campaign of the Madras State branch of the Indian Red Cross Society. The picture shows the Governor making his token contribution to the hundi collections.

The Course of Alcohol

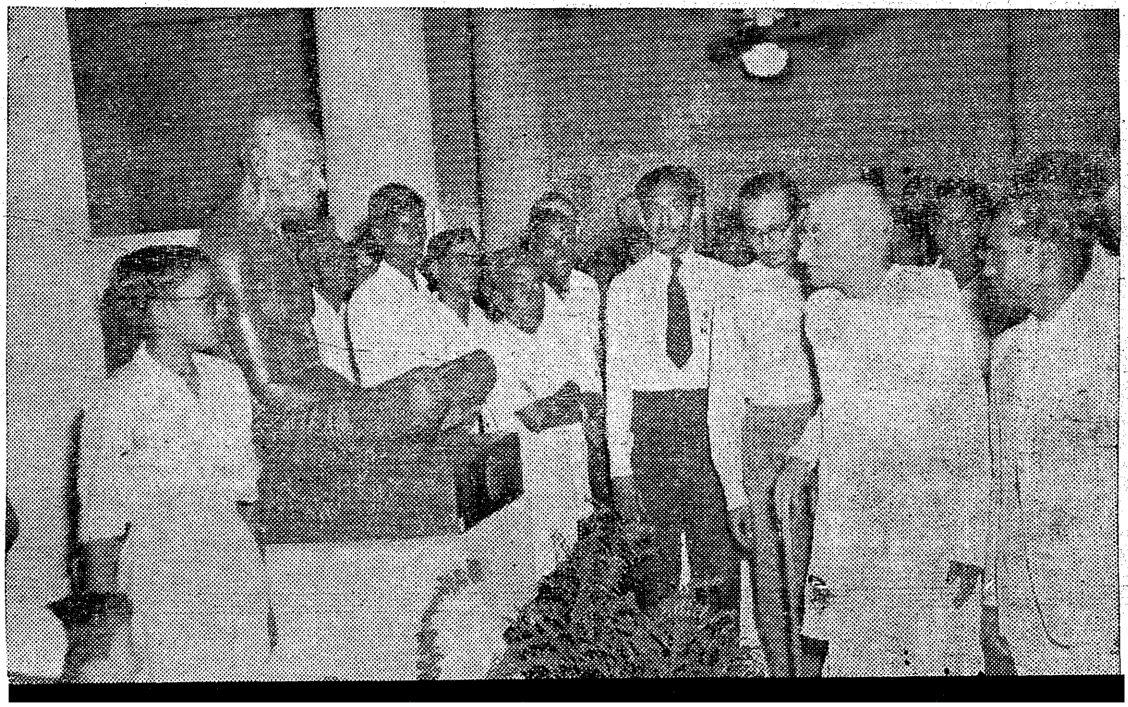
Here is medical opinion in respect of a particular case. "He has been in England for over six and a half years. He took to alcohol there first as a social habit and had to continue it later as an appetiser. Now without the same he finds his appetite considerably impaired and also he suffers from insomnia."

It is sad that young people begin with a social habit and end in a state of health when the Doctor has to ***prescribe*** liquor, thereby condemning the patient to get worse and worse.

C. Rajagopalachari

22—11—1952.

ART EXHIBITION : The Progressive Painters Association recently held their Ninth Annual Exhibition at the School of Arts and Crafts Madras City. Sri C. Rajagopalachari, Chief Minister, who opened the Exhibition, is seen here before Sri Dhanapal's study of Mahatma Gandhi.



FORT ST. GEORGE GAZETTE

NOTIFICATION

Due to increased cost of production, Government have decided to increase the rates of subscription for *Fort St. George Gazette* and its *Parts*. The revised rates of subscription will take effect from 1st January 1953 and will be as shown hereunder :—

Description of the Fort St. George Gazette.	*Subscription.* RS.	A.	P.	*Postage.* RS.	A.	P.	*Period.*
1. Full Gazette and all supplements including Rules with vernacular supplements in one language (ONE SIDE PRINTED).	25	0	0	1	8	0	Per quarter of any three months beginning from the first of any month, payable in advance.
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7. Part II—General notices by all Departments with all supplements including Rules.	3	8	0	1	0	0	
8. Part III—Containing Acts and Bills of the Union Legislature with vernacular supplements in one language only.	1	8	0	0	8	0	
9. Part IV—Containing Acts and Bills of the Madras Legislature with vernacular supplements in one language only.	2	8	0	1	0	0	
10. Rules Supplements (Part I, I-A, I-B and II) ..	1	0	0	0	8	0	
11. Statistical supplements to Part II	1	0	0	0	8	0	
12. Wholesale price-list of commodities	1	4	0	0	6	0	Per annum.
13. Monthly retail list of commodities	0	6	0	0	3	0	

Note.—(1) The postage for supply of two or more Parts together is limited to the maximum of Rs. 1–8–0 per quarter.

(2) Revised rates are applicable in the case of existing subscribers only when their present subscriptions lapse.

(3) New subscribers or those who renew their subscriptions between 1st October and 31st December 1952 will be enrolled at the existing rates for a quarter only and at revised rates thereafter.

8 Dec 1952

New Life in the Village

The Tirumangalam Story

The story is set in an obscure village in Madurai district; little was known or heard of this village—and like other villages, this one was steeped in ignorance, poverty and want—want of material needs and moral strength to get the things they were in need of done by their own efforts. Life in the village went on in the old sullen routine—with an occasional grouse against Fate which did not smile at them, and the Government which is usually blamed for all shortcomings, until one day the village was roused by a hitherto unheard-of experience. A young man, who seemed educated and better off than they were, made his appearance in a peculiar way. He did not wear pants and coat and hat. He was dressed in neat simple clothes. He was not followed by a train of suitcases and a hold-all; he appeared with a broom in hand; and what really first amused, then intrigued and finally interested the astonished villagers was that he used the broom himself. He actually swept the streets; not in that superior, symbolic way; not as a pastime; but seriously, intensely, he handled the broom as an expert sweeper and cleaned the street.

It did not take long for the intelligent villagers to see that the young man was a genuine worker who had come with a noble purpose; they ceased gazing at him in wonder or amusement; they joined him in the work; they knew he had come intent on making the village clean—and they saw what they had failed to see till now—that a clean village was conducive to their own well-being.

They had heard platform speeches on village uplift and once in a way they had also seen a magic lantern show on sanitation. But this was something new. This new type of worker did not get away after a lofty speech. He took the broom and started cleaning the village. He dug compost pits; he did countless other jobs which the villagers had neglected to do themselves. He was not alone in the work; others like him came and joined and shared the work; the villagers now woke up and they too joined in the community service. The new gospel—the harmony of theory and practice—spread. More wells were dug and deepened, roads constructed, bunds erected, with Gramasevaks and villagers working hand in hand. This happened in several villages.

"New Life" Movement

A "new-life" movement spread in the Tirumangalam firka of Madurai district. The Firka Development or Rural Welfare Programme adopted by the Government in the last quarter of 1946 has taken a deep root there. The scheme which was introduced first in 34 centres, was later extended to 50 more centres in 1950 and to another 24 centres in 1952. The Tirumangalam firka now consists of 261 villages including hamlets. The total population of the area comes to 152,062. The firka has now become a model one in the southern area.

Observers have been struck by the amazing change that has taken place in the villages that comprise the Tirumangalam firka. What has contributed to this striking success? After seeing the band of selfless workers at work in Tirumangalam a few answers or guesses can be hazarded.

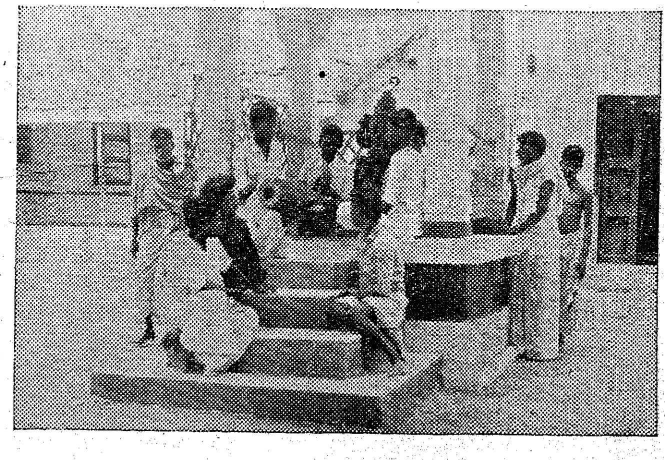
The village workers at Tirumangalam have learnt the truly human way of approach in rural uplift and development. These workers do not consider themselves as just periodical visitors or supervisory counsellors administering once in a way pontifical advice. They are among the villagers whose regeneration is their motto. The result of this complete identification with the villagers has had the most salutary effect. Whole families have joined in the community service of rehabilitating the villages. That natural hostility towards any ostentatious programme of welfare work enforced or imposed from outside is nowhere in evidence in Tirumangalam. There is not a single self-conscious or self-proclaimed saviour in Tirumangalam. Not even the most critical observer can come across a feeling of inferiority complex or helplessness in the attitude of villagers. And this is remarkable, particularly because large numbers of the villagers are composed of Harijans, Kallars and Thevars, supposed to belong to backward communities.

This selfless merging by the Rural Welfare workers is having a profound and lasting psychological effect on the outlook and attitude of the communities in villages. The so-called backward communities have ceased to feel and look so.

Village Leadership

Another important factor that has contributed to the striking success of the Rural Welfare Scheme in Tirumangalam firka has been the creation of sound village leadership in every village. Grama Seva Sanghams have been organized in almost every village under the leadership of elderly and respected persons. The sanction behind every scheme or work carried out so far in Tirumangalam has been this unity forged in villages, making possible a united action for a common, agreed cause. This local leadership and unity of action give the courage to the people to execute schemes involving considerable cost with just the minimum aid from the Government, sometimes even without it.

Just one example, out of many, may be cited in this particular context to illustrate how this leadership can



MUSIC: Bhajana party in the little mandapam in front of the village library

FOOD : Communal pounding of rice

function in terms of equity and profound social justice. The people of Deivanayagapuram decided to have a complete masonry drainage with disposal pits for their village. They had it. It was a drainage scheme worthy of any municipality. This was how they carried it out. The cost came to more than Rs. 5,000. The villagers decided to levy Rs. 2 on the basis of every acre of land owned. Thus the owner of 10 acres or 15 acres had to contribute Rs. 20 or Rs. 30 respectively. Those who owned no lands, but had carts had to contribute the free use of their carts. Those who owned neither lands nor carts had to contribute labour. The Government contribution for the work was only Rs. 500. The people of Deivanayagapuram thus had their drainage work completed.

Co-ordination

An important factor that has contributed to the success of the scheme in Tirumangalam firka is the co-ordination between the Rural Welfare Department and other Departments like the Public Works, Agricultural, Co-operative and Health Departments. The members of the special staff from all these Departments worked with the Rural Welfare staff as one team. There is no isolated activity by any of these Departments. All fit into one pattern. At every monthly meeting of the District Welfare Committee, a co-ordinated plan by all Departments was drawn up for execution and the same discussed on the basis of the experience gained, at the next meeting of the Committee, and fresh plans for the next month drawn up.

A noteworthy feature in the working of the scheme in Tirumangalam is the new spirit of camaraderie and oneness prevailing among the villagers and the welfare workers alike. The Constructive Workers' Day is celebrated at least twice in a month. The day is celebrated in villages when the entire Rural Welfare staff and the local Grama Seva Sangham evolve a common programme for work, and also execute works of an urgent and immediate nature. Intensive sanitation, mass spinning, cosmopolitan dinner, games, public meetings, and community prayer are also arranged during the day. Usually prayers are conducted in places which are found most insanitary in the morning, but cleaned up by the villagers during the day.

Achievements

In the five years of the working of the scheme, striking results have already been achieved. Quite a number of substantial ameliorative works have been carried out by the villagers themselves through their own efforts. The improvements to the Kallanai Tank carried out with the entire village turning out to the work spot, is one such inspiring example.

In the Kallanai Tank, with an ayacut of 180 acres, it was found that the crest of the dividing dam was lower than that of the full tank level and consequently when the tank got its full level, water backed up and flowed into the supply channel itself. Sufficient water could not therefore be stored up for irrigation.

Two alternative proposals came up for consideration. One was to raise the crest of the dam and the other to extend the tank-bed at the right flank by putting a new bund of about one mile in length. The Public Works Department had objections to raising the crest level. The estimated cost for extending the tank bund came up to Rs. 30,000. The villagers decided to take up the work themselves. Today, the bund work has been more than half completed. The labour involved is stupendous. Even with the work so far completed, the villagers of Kallanai were able to raise one good crop for the first time in ten years. The work is going on with undiminished enthusiasm.

They Deepen a Tank

The story of the Vidathakulam Spring improvement is another instance of self-help. There was a small natural spring 80 feet by 30 feet and 8 feet deep lying in irregular shape. This was found to be a permanent source for water-supply. The villagers kept petitioning the Government to deepen the spring and to dig a supply channel to the paddy fields. During the Grama Sevaks Constructive Workers' Day in September 1951, at the instance of the Rural Welfare staff, about 200 villagers gathered with implements and worked for the whole day from morning 8 a.m. to 5 p.m. The work was continued for a few days more and the villagers were able to remove the silt completely and dig a supply channel extending over 3,000 feet. The tank is now full and the villagers are now using the water for irrigation purposes.

Improvements to the Muruganeri village tank were also effected in the same spirit by a land army of the villagers. This is a rainfed tank with an ayacut of 101 acres. The bund was irregular in shape, having too many curves. The tank also did not have any arrangements for storing the surplus water. Without improvements, the tank was totally inadequate for the purpose of irrigation. The extension of the tank bund and the construction of a masonry weir alone could improve the tank.

The villagers joined together and formed a land army. It was decided that each household should send a representative for work or lend his cart or pay cash in case he could not contribute labour. The work on the tank bund was completed.

The work on the masonry weir at the right flank was also entrusted to the Grama Seva Sangham without letting it on contract. The work, supervised departmentally, is also proceeding.

Within a Month

Another work carried out by the villagers in this firka and now substantially helping agriculture through irrigation is the deepening of the Urandaurappanur village tank. This work was pending for the last two years. The villagers then decided to take up the work in their own hands. On a voluntary basis, the villagers excavated the tank to a depth of about 10 feet over a range of 100 feet × 60 feet and the work was completed before 15th July 1952—within less than a month of the taking up of the work. A pumpset was also fixed under the Kallar Reclamation Scheme and the improved tank is now capable of irrigating about 100 acres of land.

Another sphere in which substantial results have been achieved is in the sphere of construction of village roads. The Karisalpatti village was not accessible by any good road for a length of about two furlongs. People had to trespass through private holdings and it was felt very difficult to take bullock carts and cattle from the village to the fields.

300-Yard Road in One Day

On 29th January 1952, a Constructive Workers' Day, about 200 villagers gathered at 8 a.m. with the necessary implements and started the road work. The whole day they worked. About 300 yards length of road was completed on the day. The long-felt need for an approach road had taken shape through their self-efforts without depending on any other source. The estimated cost of the work done during the day amounted to Rs. 500.

Ten per cent Cut in Pay for Government Servants

In view of the present acute financial position of the State, the Government have decided that a cut of 10 per cent should be imposed in the pay of all Government servants under their administrative control drawing a pay above Rs. 300 per mensem. The Government of India are being addressed for the issue of an order or rule by the President to enable this Government to give effect to the cut in respect of the officers serving in this State who are under the rule-making control of the Government of India.

The Governor and the Ministers have voluntarily agreed to the cut in their salaries.

The cut will be in force for 12 months from 1st January 1953, i.e., the cut will begin to operate from the pay for December, 1952, to be disbursed in January 1953. The first Rs. 300 of a Government servant's pay will not be liable to any cut. It will not apply to dearness or any other allowances. The cut will apply to pensioners who are re-employed under the Government and their liability to the cut will be determined by their total emoluments made up of pay and pension (of course excluding dearness allowance and other compensatory allowances, etc.).

Dearness and other allowances will continue to be calculated on the pay without 10 per cent cut.

Again, recently, the villagers constructed a road one mile and two furlongs long at Orapanur connecting Keelavarappanur to Urandaurappanur. The work was completed in seven days. The road was opened by Shri Sri Prakasa, the Governor of Madras, during his recent visit. The villagers promptly named it ' Sri Prakasa Road '.

During the five-year period, 26 road works were sanctioned covering about 40 miles of which 20 are nearing completion. The total amount sanctioned by Government was Rs. 90,000. Villagers in many cases surrendered lands free of cost for laying the roads or paid in cash one-fourth of the cost of the land acquired. In all cases, they contributed at least one-fourth of the cost for the execution of all the road works.

Water-supply and Drainage

In the sphere of rural water-supply, the villagers in Tirumangalam have achieved magnificent success. Everywhere one sees beautifully constructed wells, kept under most sanitary conditions. One hundred and thirty well works were completed during the years 1947—1952 at an estimated cost of Rs. 1,39,500 of which Government sanctioned Rs. 89,000. The balance amount, viz., Rs. 50,000, was contributed by the villagers.

Another sight, unusual in an ordinary village, is the pucca masonry drainage constructed in several villages with competence and even artistry. Most of these drainage

HEALTH : Medical relief from a mobile van

schemes have been carried out at the villagers' own cost or in a few cases with only the minimum aid from the Government. Today 24 villages can boast of masonry drainage covering a distance of 79,000 feet carried out at an approximate cost of Rs. 1,00,000.

In addition to all these, the villagers, utilising the Collectors' discretionary grant, have carried out more than 200 items of works such as improvements to wells, construction of school buildings, reading rooms, community halls, maternity centres, bathrooms, disposal pits, culverts and latrines. Besides, radio sets and stud bulls were also purchased with Government grant. The total cost of all these improvements came to Rs. 1,80,400. The amount sanctioned by the Government was only Rs. 60,800 while the rest Rs. 1,19,600 was the contribution of the villagers. That means, more than double the grant was contributed by the villagers.

Better Farming

Special attention is also paid in increasing production of foodgrains, cotton and vegetables by subsidising the agricultural requirements and offering various facilities to the farmer. Attempts to make good the deficit in foodgrains are made by adopting improved methods of cultivation using improved strains of paddy and millets. Farmers are encouraged to prepare compost manure with waste vegetable matter like grass, weeds, stubbles of crops and other farm wastes. A subsidy of Re. 1 is paid for every ton of compost prepared. About 2,000 compost pits were dug, making not less than 10,000 tons of manure. For purposes of better irrigation, the existing tanks are being improved and subsidy paid for digging irrigation wells. Five thousand acres of dry land were brought under K2 cotton seed multiplication scheme in 1952 and loans at the rate of Rs. 25 per acre were also granted. The total amount of loans granted was Rs. 14,000.

Model farms are also run in villages, the special staff of the Agricultural Department giving intensive training to the villagers in the process.

Training Artisans

With a view to encourage village industries and to train artisans on up-to-date methods, a Village Industries Training Centre has been started at the Kallupatti Grama Sevak Vidyalaya. The Centre is run by competent persons who have undergone training at the All-India Village Industries Association, Wardha. The main subjects dealt with are oil-pressing by improved ghani, paper making, food processing, bee-keeping, palm-gur, pottery, spinning and Khadi weaving, soap making, metal works, etc. Thirty-two candidates are given training in the advance course for one year in weaving and 30 candidates are selected from villages, mostly artisans who are given six months' free training in village industries.

Arrangements have also been made through multipurpose co-operative societies to collect and distribute raw materials for artisans and also arranged to find markets for finished goods through the Central Sales Society. Improved tools have also been supplied free of cost to deserving artisans through the Industrial Department and so far about 942 tools worth about Rs. 9,000 have been distributed to 275 artisans.

Khadi and Charkha

To achieve self-sufficiency in clothing, an Extensive Khadi Scheme has been started in this area. Under this scheme, charkhas are being distributed on concessional terms by giving subsidy at Rs. 3 per charkha and also by paying a subsidy of eight pies per hank of yarn used on self-sufficiency basis. Two thousand six hundred charkhas have been distributed in this area on concessional terms over and above 1,000 charkhas that were plying originally.

About 25 villages in the development area have been electrified for the main object of promoting agriculture. One hundred and fifty pumpsets have already been fixed and arrangements are being made for agricultural loads for 130 more pumpsets.

Culture and Recreation

Village games, sports, dramas, folk dances and bhajanas and community prayers are conducted regularly. There are periodical inter-village tournaments and prizes are distributed to the winners. Radio sets have been installed in 16 villages under the auspices of the local Panchayat or Co-operative societies, the Government paying a half-contribution towards the cost. There is also a Central Library at Tirumangalam with 65 branch libraries in the villages. Books and periodicals are circulated among the branch libraries.

The above account gives only a meagre idea of the stupendous constructive efforts going on in Tirumangalam. There one can see old and wrinkled men handling slate and chalk; though their hands are shaking, their minds are firm in the purpose. That is the start of a new life. The leader of one such group was reading out a newspaper to his fellowmen. They were discussing an item—Sri Vinobaji's 'Bhoodan Yagna' movement.

Tirumangalam is an object lesson in a modern world. Good simple folk, however 'backward', respond to sincere, constructive approaches. Coercion need have no place in society, if the heart is good and there is goodwill for all.

Soil Conservation Measure Sanctioned for Puliakata Lake

The Government have sanctioned an expenditure of Rs. 5,753, for planting *Proposis Juliflora* and casuarina trees on the tank bed of Puliakata lake in Sulurpet Taluk, Nellore District, as a soil conservation measure.

Rural Welfare Scheme for Nagarikatakam

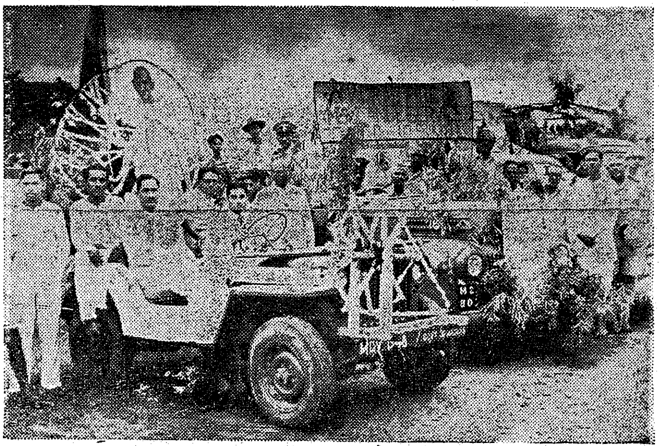
The Government have ordered the extension of the Rural Welfare Scheme to Nagarikatakam firka during the year 1952–53. Sri N. Bhagwandas, I.A.S., Collector of Srikakulam district, convened a meeting of all District Officers on 1st October 1952, to chalk out ways and means to inaugurate the Rural Welfare Scheme in the new Nagarikatakam firka. At the meeting, it was decided to inaugurate the scheme in Rottavalasa, Saribujjili, Borrampeta and Iscatpeta in a spectacular manner.

On 5th October 1952, the District Officers assembled at Saribujjili by 3 p.m. A guard of honour was presented to Sri S. B. P. Pattabhirama Rao, Minister for Rural Welfare, by the Red Cross volunteers of the Municipal High School, Srikakulam. The Firka Development Scheme in Nagarikatakam firka was inaugurated by the Minister for Rural Welfare with Sri N. Bhagwandas presiding. The Collector read a short note on the work done in the last 12 months.

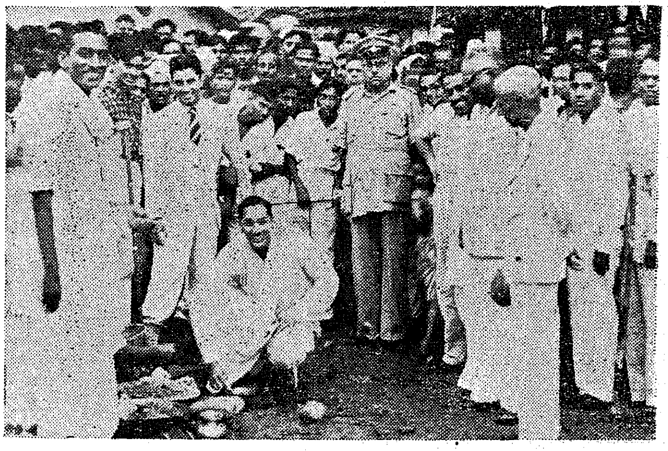
The Minister then laid the foundation stone for a children park. After the inauguration, a pageantry vehicular procession—35-mile procession—traversed the entire length of the new firka; vehicles of all departments taking part in the Rural Welfare activities took part in the procession. There were nearly 20 vehicles, all tastefully decorated. The roads were lined with villagers. The procession was led by a jeep in which the Minister and the Collector were accommodated, painted white and tastefully decorated with a life size cut-out painting of Gandhiji and a decorated charkha in front.

The other highlights of the celebration were the celebration of the compost week and opening of a well in Borrampeta; introduction of spinning and presentation of one charkha in Iscatpeta, initiation of stocking of fingerlings in a tank in Saribujjili and the opening of a road connection the Rottavalasa village with the highway, all by the Minister.

This spectacular inauguration was received with enthusiasm by the villagers who not only enjoyed the pageantry and show but co-operated fully in all the functions.



VEHICULAR PROCESSION: The highlight of the Inauguration Ceremony of the Rural Welfare Scheme was a pageant of a 35-mile vehicular procession. Photo shows some of the vehicles that took part, with Sri S. B. P. Pattabhirama Rao and Sri N. Bhagwandas, I.A.S., Collector, Srikakulam district, in the jeep.



A PARK FOR CHILDREN: Sri S. B. P. Pattabhirama Rao, Minister for Rural Development, laid the foundation stone for a Children's Park when the Rural Welfare Scheme was inaugurated for Nagarikatakam firka, Srikakulam district.

Proposals for Engineering Research Schemes Invited

The Board of Engineering Research of the Council of Scientific and Industrial Research would be glad to receive proposals for schemes of research in various branches of engineering and requests for suitable grants-in-aid for this purpose. There are five expert committees which will help the Board of Engineering Research to examine and assess the schemes submitted. These are on civil structural engineering; mechanical engineering (including machine tools); electrical and radio engineering; hydraulic engineering and aeronautical engineering.

The schemes will be placed before the Governing Body of the Council of Scientific and Industrial Research, for consideration and approval at their next meeting in March 1953.

The Council of Scientific and Industrial Research recently constituted the Board of Engineering Research with the functions of initiation, co-ordination and development of engineering research in the country, as it was felt that collaboration of the scientist and the engineer is essential for successful industrial application of scientific research.

Interested institutions and research workers may write to the Council of Scientific and Industrial Research, 'P' Block, Raisina Road, New Delhi, for further information.

Adult Education Week

Adult Education Work has obtained a new significance in India. The old days are gone—the old days of rule by firmans, the lethargic people just paying taxes and minding their own business and suffering when sufferings came with an occasional grouse against Government and God, all in a mood of fatalism. Now the people have become conscious of their new role in Society. Adult franchise has confirmed on them a supreme right—the right of choosing the kind of Government they want. The proper exercise of this right demands new conditions—a mental equipment on the part of the people that can properly evaluate concepts like civic rights, duties and responsibilities. Literacy is a first step towards the creation of this condition in Society. And the earlier it is spread among the masses, the better for the survival of our infant democracy.

Conscious of the duties of the enlightened few towards the unenlightened many, the South Indian Adult Education Association sponsored the Adult Education Week in the State, which was inaugurated by Dr. M. V. Krishna Rao, Minister for Education, on 8th November 1952 in Madras City. Other social service organisations and students in various colleges helped the Society in making the Week a success. The Week was inaugurated in Swatantra Nagar in Lloyds Road, a slum area where work in this direction has been progressing successfully for some time now.

Inaugurating the Week, the Minister for Education stated that the movement should be a national movement and its success depended on the activity of the whole community, particularly of those who were educated and patriotic. The role of the Government was to co-operate with them and create facilities. Till recently the Madras Government, he said, had very little organised activity in the sphere of adult education. It is only since 1948 that some activity was seen. The Government of India, he said, wanted the Madras Government to submit to them certain proposals and came forward with assistance in 1949. Since then, the conditions improved a little. In May 1951 there were about 1,200 adult literacy centres. He was glad that at the present day the number was 2,400 of which 1,727 were run by private agencies. A limited number were run by Panchayats and District Boards and Municipalities and the Madras Corporation.

Proceeding, the Minister said that the Adult Education Scheme of the State provided for the formation of District Councils and local Social Education Committees. He was glad to find that some of the Colleges were coming forward to run summer camps for social service in which adult education work figured prominently. To achieve the object of Adult Literacy on a mass scale, he said, the entire educated section of the community, official or non-official, should mobilise itself to the task. In that sense they had to think not of one education week but of such a celebration throughout the year. The services of elementary school teachers could be utilised in every village, but over and above that he felt that all schools, colleges and University institutions and teachers and senior students should try to develop an Extension Department and an annexe to their activities which would take up the work. In that attempt, the Minister said, this Government would give all encouragement and facilities.

The Week was also celebrated by various social service organisations in the City and also College Associations. A free Adult Education Class was opened at 150, Mount Road, under the auspices of the Madras Service League, by Sri J. L. P. Roche Victoria in the course of the Week.

Books for Neo-Literates: Manuscripts Invited

The Delhi Public Library invites manuscripts of easy-to-read books for neo-literates under the publication programme of the Library which has received a special grant from the UNESCO for the preparation of such material for neo-literates.

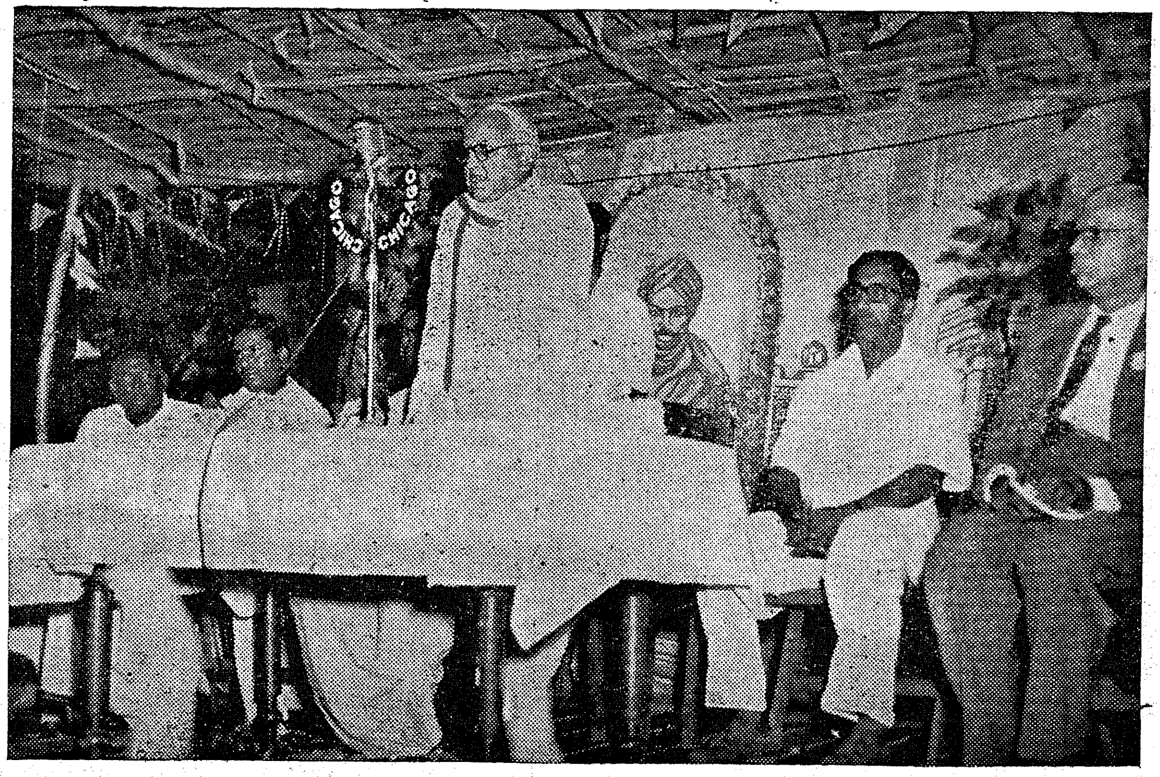
The manuscripts are required on these subjects: Economic Geography of India; Physical Geography of India; Human Geography of India; Our rural and urban community centres like Faridabad, Nilokheri and Etawah, etc.; Power development projects; Education in India; Our Children; United Nations; UNESCO; W.H.O.; Masonry; Elementary carpentry; Quick Dish Menus; and Putting Waste to Use.

The first three manuscripts may be of 16 to 24 pages and the rest between 32 to 48 pages. Approved manuscripts which should preferably be in Hindi, though acceptable in English and Urdu, will remain the property of the Delhi Library Board and will be paid for at the rate of Rs. 100 per 5,000-6,000 words and Rs. 200 per 10,000-12,000 words. The Board may refer back the approved manuscripts for re-writing and will have the right of editing and translating manuscripts into other languages, if necessary.

Manuscripts should be submitted by January 1, 1953, to Shri D. R. Kalia, Secretary, Delhi Library Board, Queens Road, Delhi 6, from whom further particulars may be obtained.

31st International Montessori Training Course

The 31st International Training Course for teachers is being held by the *Association Montessori International* in London, from January 19, 1953, to July 18, 1953. The lectures will deal with the Montessori Method in all its aspects, with particular emphasis on the fostering of international understanding from an early age. The idea is to bring about a close understanding between individuals of different nations, and considerable efforts would be made to change educational programmes with that particular aspect in view. In addition, instruction will be given in subjects forming part of the general school curriculum.



ADULT EDUCATION WEEK: Dr. M. V. Krishna Rao, Minister for Education, inaugurating the Third Adult Education Week in Madras State, Swatantra Nagar, Lloyds Road, Mylapore. The Week was organised by the South Indian Adult Education Society.

Service Agency ror Educationists

The activities of the Central Bureau of Education form the theme of a brochure entitled *The Central Bureau of Education*, just published by the Ministry of Education, Government of India.

Organised as a service agency through which the Ministry can be of assistance to States as well as to educationists and educational institutions, the Central Bureau of Education consists of six sections dealing with Publication, Information, Statistics, Audio-Visual Aids, the Central Education Library and the Central Secretariat Library.

The publication work of the Bureau includes research and compilation, preparation and printing of pamphlets, exchange of the Bureau's publications with outside agencies and distribution within India of gift books received from abroad. The publications so far brought out include Directories like *Humanistic Institutions and Societies in India* and studies in educational psychology like *Attitudes of Student-Teachers towards Children's Behaviour. The Single-Teacher School* and the *Vidya Bhawan Open Air Session*, two studies on educational experiments, will be published shortly. The Publication Section has also brought out a number of pamphlets in its series *Facilities for Advanced Studies Abroad*, dealing with Architecture, Engineering, Public Health, Veterinary Sciences, Social Welfare, etc. The Section also publishes the *Education Quarterly*.

The Information Service of the Bureau compiles data on education in India and foreign countries and meets numerous enquiries, not only from educationists and the general public in India and abroad, but from various diplomatic missions and international organisations like the International Bureau of Education, Geneva. Literature on foreign Universities and institutions received in the Bureau is distributed to many students' advisory organisations in the country.

The Statistical Section compiles data on all aspects of education, processes them into educational charts, pictorial diagrams, graphs, etc., attends to statistical enquiries on education from educationists, research scholars, publishers, foreign governments, international organisations, etc., and has so far brought out 32 publications.

The Audio-Visual Aid Section maintains a film library with a stock of over 1,000 educational films and film strips which are lent free of charge to all approved institutions and organisations engaged in educational, social and cultural activities throughout the country. The present membership of the Library is 230 and on an average about 400 films and film strips are issued every month. Recently it has started organising a library of educational charts and posters also.

The Central Education Library receives nearly 400 periodicals, more than half of which are concerned with

technical aspects of education. It also maintains an Adult Literature Section for catering to the special needs of the semi-educated members of Class IV Service of the Government of India and also a Children's Section which has built up a good collection of children's literature in English as well as in different Indian languages. The Central Secretariat Library which has grown by absorbing the collection of several libraries such as the old Fort William Library, the Kashmir Residency Library, etc., has now about 95,000 volumes.

The Bureau of Education came into being five years after the formation of a separate Education Department in the Central Government of India in 1910. The Inchcape Economy Commission, however, abolished the Bureau in 1923. It was not before the latter part of 1937 that the Bureau was revived when the recommendations of the Hartog Committee were implemented. The Bureau was then revived under the control of the Educational Commissioner with the Government of India for dealing specifically with the collection and dissemination of literature relating to educational problems in different provinces. The brochure also indicates the directions in which the Bureau can expand its activities when the financial situation improves.

National Cadet Corps

The annual camp of the National Cadet Corps Junior Division Units (Army Wing) attached to the High Schools in the State, were held from September 19, 1952, to September 28, 1952, in the undermentioned centres :—

	Number participating	
	Officers.	*Cadets.*
1 Avadi	20	630
2 Visakhapatnam	14	450
3 Bangalore	19	600
4 Trivandrum	11	330
5 Tiruchirappalli	22	660
6 Cannanore	14	450
	100	3,120

The camps were conducted by the Liaison Officer, N.C.C. Junior Division Units in Avadi and the Officers Commanding the Senior Division Units in other centres.

The cadets took certificate, parts A I and II Examinations during the camps. The Government appointed *ad hoc* committees of official and non-official visitors to vist the camps held at centres in this State and to see the arrangements made.

The reports received by the Government from the members go to show that the camps were run well.

Teachers' Handbook of Social Education

The Central Ministry of Education will shortly bring out a Handbook of Social Education for Teachers.

Social education aims at providing not only literacy but training for a fuller and more abundant life for the masses who have had to face handicaps and deprivations for many decades. The need for publishing such a handbook to give workers the right orientation in the field of social education and guide them in their day-to-day work has been felt ever since the Conference of State Social Education Workers met at New Delhi in 1949. The present publication is expected to meet the needs of these workers and to provide them with new ideas and suggestions so that their techniques do not become static. For social education programmes call for constant adaptation to the changing needs of national life and ideology.

The handbook is divided into three parts : The first part will deal with the historical and theoretical background of social education, the second with the syllabus, supply and training of teachers and examinations, and the third with the agencies and associations directly or indirectly concerned with adult education. The various chapters in the first part are devoted to the purposes of adult education, psychology of adults and methods employed in their education. The specimen syllabus is an adaptation of the syllabus which has been used successfully in the social education programme implemented in the Bombay State. The section on agencies of social education includes chapters on the part played by Universities in adult education, inter-departmental co-operation and libraries and museums.

Appendices describe educational work among adults in certain other countries where the problems of social education are more or less similar to those in India. They also incorporate a tentative directory of voluntary associations working in the field of social education.

Students of Eligible Communities Exempted from Examination Fees

The Government have empowered the Director of Harijan Welfare to grant exemptions, subject to the usual rules and regulations, to the students of the Madras University, belonging to the eligible communities, from the payment of fees to sit for the University examinations.

In the case of students of Andhra University, which gives only half-fee exemption to the students of eligible communities, the other half of the examination fee will be paid in advance by the Director of Harijan Welfare.

It may be stated in this connection that the Annamalai University gives full exemption from the payment of fees to the students belonging to the eligible communities.

8 DEC 1952

Plea for Protection to Handloom Industry

The series of discussions which the Planning Commission proposed to have with the important political parties before finalising their recommendations on the Five-Year Plan took place recently in New Delhi. Here members of the Congress Working Committee met the Commission, namely, Sri Jawaharlal Nehru, Prime Minister, Sri Gulzarilal Nanda, Minister for Planning, Sri C. D. Deshmukh, Finance Minister, Sri V. T. Krishnamachari, Sri R. K. Patil and Srimati Durgabai.

Members of the Congress Working Committee besides Sri Jawaharlal Nehru present were Maulana Abul Kalam Azad, Dr. K. N. Katju, Janab Rafi Ahmed Kidwai, Sri Jagjivan Ram, Sri Lal Bahadur Sastri, Sri Govind Vallabh Pant, Sri Morarji Desai, Sri U. N. Bhebar, Sri N. V. Gadgil, Sri Khandubhai Desai, Sri Balwant Rai Mehta, Sri U. S. Malliah and Sri S. N. Aggarwal.

Sri C. Rajagopalachari was present by special invitation.

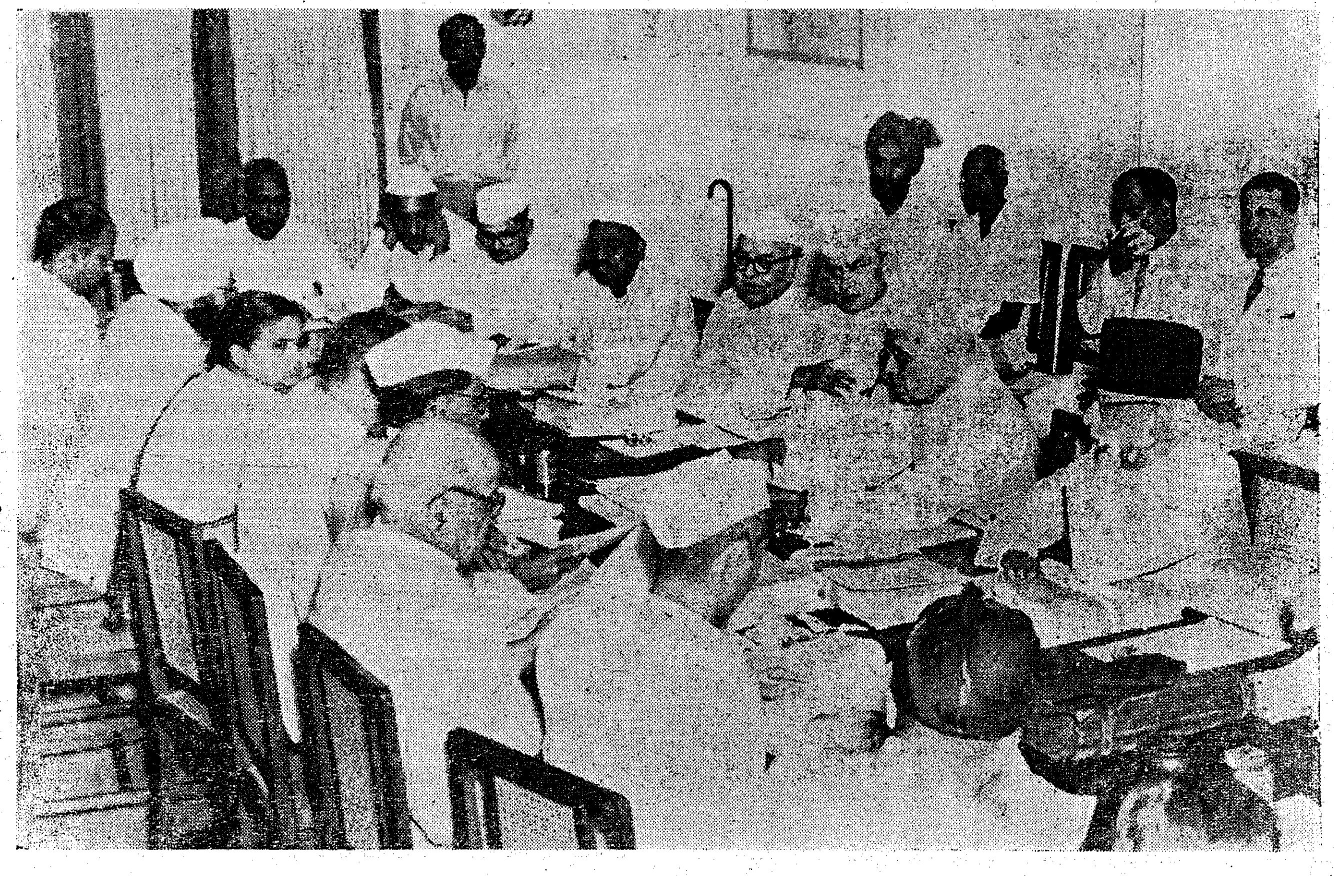
Total Expenditure of Rs. 2,000 Crores

The recommendations with such modifications as may be necessary in the light of discussions that take place with the leaders of the various political parties, will form the Final Report of the Commission. After the discussions are over, the Commission will consult its Advisory Board and the recommendations will be finalised after hearing the views of the National Development Council.

Sri Gulzarilal Nanda, Planning Minister, said that the Five-Year Plan as indicated in the Draft Outline has been revised in many respects and the total cost now comes to Rs. 2,000 crores as against Rs. 1,793 crores which was the cost of the two parts of the Plan in the Draft Outline. In the Final Report, there would be no second part and the Plan would be treated as one whole. The increase in expenditure in the Revised Plan is due mainly to additional funds provided for schemes on railways, river valley projects, new river valley schemes, basic industries and transport, community projects, relief works caused by natural calamities, minor irrigation works, loans to agriculture and to municipal corporations, assistance to Kashmir for its development plan, industrial housing, port development, etc. Certain new schemes, particularly some irrigation and power projects and a special scheme of social welfare services, which have been included in the revised plan will also mean additional expenditure.

Handloom Industry

Development of the handloom industry formed a subject for discussion. Sri C. Rajagopalachari suggested



DRAFT FIVE-YEAR PLAN: Members of the Planning Commission met the Congress Working Committee members in New Delhi on October 16, 1952, to discuss the Planning Commission's tentative recommendations in the Final Report of the Five-Year Plan.

the reservation of certain types of cloth to handloom weavers which will provide additional employment to a large section of the people and also increase production. The need for expansion of the handloom industries has been recognised in the Plan which has recommended an increase of 800 million yards of handloom cloth during the five-year period from 900 million yards in 1950–51 to 1,700 million yards in 1955–56. The suggestion to reserve certain types of cloth to handloom weavers only was discussed in detail at the meeting. Various aspects of the proposal, viz., the extent to which employment can increase in the rural areas, the effect that such a recommendation will cause on the price situation and unemployment, if any, that will be caused in the ranks of mill workers were particularly commented upon.

The members present emphasised the need for improving the efficiency of the handloom weavers and suggested that the protection should be given for a certain specified period within which the industry should improve its efficiency by adopting better technology and improving on the artistic finery of its products.

Textile Dyeing and Printing Works: No Sales Tax for One More Year

The Government have directed that the dyeing and printing works be exempted from sales tax for a further period of one year from April 1, 1952, and that the percentage of deduction towards cost of labour in respect of such contracts for purposes of rule 4 (3) of the Turnover and Assessment Rules should be fixed at 50 with effect from April 1, 1953.

All-India Handloom Board Constituted

The Government of India have set up an All-India Handloom Board to advise Government on the problem of the Handloom Industry. A Commerce and Industry Ministry resolution, published in a *Gazette of India* Extraordinary dated October 25, 1952, says the Government of India have decided to set up this Board in place of the present Standing Handloom Committee.

The Textile Commissioner to the Government of India will be the Chairman of the Board, which will have sixteen members. The other members of the Board are Janab Abdul Quayum Ansari, Bihar; Sri P. R. Chikodi, Chairman, District Industrial Co-operative Society, Belgaum; Sri M. P. Nachimuthu Mudaliar, Vice-President, Madras Handloom Weavers' Provincial Co-operative Society, Madras; Sri Y. N. Paonikar, Secretary, All-India Weavers' Congress, Umrer, Nagpur District; Sri M. Somappa, President, Yemmiganur Weavers' Co-operative Society, Yemmiganur; Sri K. Sundaram, the Coimbatore Cotton Mills, Singanallur P.O., Coimbatore; the Director of Cottage Industries Government of Uttar Pradesh, Lucknow, or his nominee; the Additional Director of Industries, Government of Bihar, Patna, or his nominee; the Director of Commerce and Industries Government of Hyderabad, or his nominee; the Director of Controlled Commodities, Government of Madras, or his nominees; the Director of Industries, Government of Madhya Bharat, Indore, or his nominee; the Joint Registrar for Industrial Co-operatives and Village Industries, Government of Bombay, or his nominee; the Joint Textile Commissioner to the Government of Bombay; the Registrar of Co-operative Societies, Madras, or his nominee; and the Director (Yarn and Handlooms), Office of the Textile Commissioner to the Government of India, Bombay (Secretary).

Additional members will be appointed as and when necessary. According to the resolution, the Government of India also propose to create a Handloom Fund, from which grants of loans will be made for financing, in whole or in part, activities necessary for the development and improvement of the Handloom Industry. Among the purposes or subjects for which loans or grants could be made are—

(*i*) Ensuring a steady and adequate supply of suitable yarn to the Handloom Industry, including the holding stocks, where necessary;

(*b*) establishing marketing organisations in the country and abroad;

(*c*) promoting research, improvements in and better techniques of production;

(*d*) training of personnel, arranging for improved equipment, prescribing standards of quality and the establishment of machinery to maintain those standards; and

(*e*) encouraging co-operative effort amongst Handloom weavers.

The functions of the Board will be, besides advising Government generally on the problems of the Handloom Industry, to examine schemes for the improvement and development of the Handloom Industry, and to make their recommendations for assistance from the Handloom Fund.

Power Supply in Madras State

By Sri N. RANGA REDDI, Minister for Public Works

The power position in the State can be conveniently dealt with under the following groups :—

1. The Southern Hydro Grid fed by Pykara, Mettur and Papanasam Hydro-Electric Powerhouses and the Madurai Thermal Station.

2. The Madras Thermal System served by the Basin Bridge Power house.

3. The Andhra Power System comprising the Thermal stations at Vijayawada, Visakhapatnam, Kakinada and Rajahmundry. This area will eventually be served by the Machkund Hydro-Electric Scheme.

4. The Rayalaseema System comprises the areas served now by Mysore Jog Power and the Thermal stations at Kurnool, Anantapur, Cuddapah, Proddatur, Nandyal, Tadpatri and Nellore.

5. The South Kanara area to be served by the Mysore Jog Power System.

The installed capacity of generating stations totalled about 160,000 K.W. at the end of the War in 1945. The demand for power is every day increasing and a number of major schemes were therefore taken up to add an additional 180,000 K.W. power. Some of them have been completed, viz., the Nellore Thermal Scheme in the Rayalaseema Grid, the first stage of the Madurai Thermal Scheme and the Visakhapatnam, Vijayavada and Papanasam Extensions.

Machkund

These have added 34,000 K.W. of power. Most of the other works will be completed in 1954. One of the three units generating 12,000 K.W. of power in Moyar has been put into operation in April last. The Machkund Hydro Scheme which is a joint scheme financed by Madras and Orissa States will be completed in 1954, adding 51,000 K.W. capacity. Orders for the plants for the Tungabadra Hydro Power Station have been recently placed, and this, when built, will supply power to the entire Ceded Districts area and will enable Government to stop the supply of power from Mysore and also shut down oil engine stations in various parts of the Rayalaseema area. The rest of the programme consists of extensions to the existing powerhouses to provide additional supplies of 23,000 K.W. at Pykara Hydro-Electric Station, 30,000 K.W. at Madras Thermal Station and 10,000 K.W. at Madurai Thermal Station. The Machkund Hydro-Electric Project is the largest single item in our electricity programme and it is ultimately capable of developing 100,000 K.W.

Southern Grid : In the Southern Grid the existing demand amounts to 232,560 K.W. against available power in 1953–54 of 176,000 K.W. in the irrigation season by which time most of the schemes under execution will be completed. It is therefore clear that the schemes under construction cannot meet all the demands in sight and new powerhouses are absolutely necessary, and until they are erected power restrictions have to be continued and we have to go slow in giving further connections.

Madras System : In the Madras Grid, the total power demand at the end of 1953–54 and the then available generating capacity will be 49,150 K.W. and 47,000 K.W. respectively, and the shortage of power will continue even after the two 15,000 K.W. sets are commissioned.

Andhra Power System : The total demand will be 24,100 K.W. By the end of 1953–54 the Machkund generating sets will come into operation. The effective capacity available for Madras share under first stage of the scheme will be 23,000 K.W. which is just about the demand anticipated in 1953–54. Machkund will also have to come to the rescue of the other systems in Madras and further demands will have to be met by taking the second stage of Machkund providing for further generating plants.

Tungabhadra

Rayalaseema Grid : This area is at present served by Mysore power from the Jog Scheme and a number of small diesel stations at Anantapur, Kurnool, Cuddapah, Proddatur, Nandyal and Tadpatri, and a steam station at Nellore. The aggregate demand in 1953–54 will be 12,240 K.W. against the available total capacity of 10,225 K.W. The position will be tight until 1955–56 when the first stage of the Tungabhadra Hydro Scheme is expected to be completed, bringing in an additional capacity of 26,400 K.W.

South Kanara Area : A separate scheme for supplying this area from the Mysore Jog system has been sanctioned ; but the agreement for the supply of power between Mysore and Madras has not been signed as yet. In the meantime sanction has been accorded for the purchase of an additional 500 K.W. diesel set for installation at Mangalore as an immediate measure to put the power position in the Mangalore area on a better footing. The matter is under correspondence between the private licensee at Mangalore and the Government as to the terms under which the diesel set has to be installed.

The conclusion to be arrived at from the foregoing is that the power demand is far ahead of the power available in the State, that power restrictions are now the rule and there has been therefore much public dissatisfaction both from the agriculturists and industrialists. The schemes under construction will suffice only to meet part of the demand and new schemes will necessarily have to be undertaken.

In the matter of rural electrification Madras probably takes the lead in the whole of India. The number of villages receiving electric supply is over 2,200. About 3,000 new pumpsets are being connected each year in rural areas. The total number of agriculture pumpsets connected up to the end of previous financial year was nearly 19,000 as compared to only 5,900 in 1946.

Acquisition Programme

The policy of the Madras Government has been to acquire all electricity undertakings by virtue of the Act placed on the Statute Book in 1949. There are three agencies functioning in the State, both for generation and distribution, viz., the State, the local bodies including Municipalities and the private licensees. It is true that some private licensees have done good work in the matter of rural electrification. But it cannot be gainsaid that

rural electrification is not a paying proposition for them, and both the Municipalities and private licensees are reluctant to extend to the rural areas. Further, the private licensees as well as the Municipalities purchase energy in bulk from the Government and only distribute the energy. If power has to be extended to rural areas as is the policy of the Government, it would be essential to rationalise the generation and distribution of energy in the State as a whole, and by having only one agency, viz., the State, duplication can be avoided in many areas which will result in great economies.

The acquisition programme has to be completed in five stages. But owing to lack of funds the Government are compelled to go slow in the acquisition programme, and this year a sum of Rs. 20 lakhs only has been provided in the Budget for the purpose, out of Rs. 8 crores allotted for the Demand under Electricity. Only a few have been acquired by now. The Government want to postpone the acquisition of undertakings owned by private licensees if they are giving good service, to the last stage, viz., fifth stage.

Projects for Telugu Areas

Criticism has been levelled that all the hydro-electric projects have been developed only in the South and not in the Telugu areas. Things like a *head* and perennial flow of water are necessary for a hydro-electric project and when these conditions are absent, hydro power projects cannot be developed. Where it is possible to serve the interests of the Andhra area by constructing a hydro-electric project, this Government has been doing so. The Machkund Hydro Project is one such and it is situated in Orissa. But it serves the Telugu area. It is well to remember that the projects which require the concurrence or consent of another State for implementation are not capable of quick execution as those which can be executed in our own State. Another criticism has been levelled that even if hydro-electric systems cannot be developed, thermal plants could be installed and they could be developed.

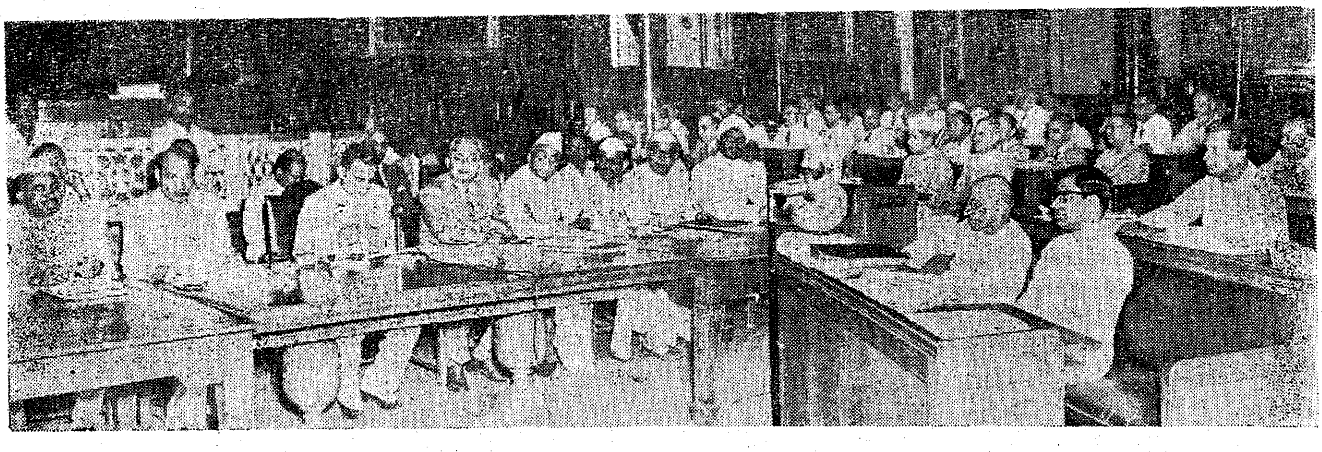
The industrialists as well as labour have been complaining of imposition of cut in the use of electricity and urge that thermal schemes should be kept in readiness, so that they may serve as a stand-by in case the hydro-electric schemes do not supply energy on account of failure of monsoon. It should not be forgotten that machines should be imported from a foreign country, both for hydro-electric projects and thermal schemes, and it takes time for the manufacture of machines of the type we want. The countries which manufacture these machines were till now engaged in setting their own houses in order on account of the devastation caused by the War.

Financial Stringency

Added to that, the State has got its own financial difficulties in finding funds. It should not also be forgotten that the desire for the use of the energy for the agriculturists is a recent one and there was a time when agriculturists had to be coaxed for using the energy. In the Rayalaseema area practically most of the electrical concerns were run by private licensees and as they did not give satisfactory service they were taken over by Government. It is therefore clear that no accusation of unfairness or discrimination to a particular area can be made in the development of electrical projects by the Government.

I should like to mention that the electricity development programme has to go slow on account of the financial stringency. If funds are made available there are many schemes which have been investigated, for being implemented. The Madras Government have recommended to the Centre a supplemental plan for including the Periyar Hydro-electric Scheme and the Kundah Hydro-electric Scheme. The former one costs Rs. $10\frac{1}{2}$ crores and would provide 75,000 K.W. and 100,000 K.W. ultimately. The Kundah Scheme in the Nilgiris will generate power to the extent of 75,000 K.W. in the first stage and 150,000 K.W. ultimately and it is estimated to cost a little over Rs. 30 crores.

(A.I.R., Madras)



FINANCE MINISTERS' CONFERENCE : A two-day Finance Ministers' Conference was inaugurated in New Delhi on October 14, 1952, by Sri C. D. Deshmukh, Finance Minister, Government of India.

(Left to right, front row) : *Sri Jagjivan Ram, Central Minister for Communications ; Sri Mahavir Tyagi, Minister for Revenue and Expenditure ; Sri C. D. Deshmukh ; Sri B. Rama Rau, Governor, Reserve Bank of India ; Sri M. C. Shah, Deputy Minister for Finance ; Sri G. L. Nanda, Minister for Planning, Irrigation and Power ; Janab Rafi Ahmed Kidwai, Minister for Food and Agriculture ; Sardar Swaran Singh, Minister for Works, Housing and Supply ; Sri C. Rajagopalachari, Chief Minister of Madras ; Sri C. Subramaniam, Minister for Finance, Government of Madras.*

Electricity: Review for August 1952

Review of the activities of the Government Electricity Department for the month of August 1952 is given below :—

Machkund Hydro-electric Scheme.—Land acquisition proceedings were continued. The Lamptaput-Machkund headworks road was completed and was being maintained in good condition. The road from Soguru to Jalaput was formed and metalling was done to a length of 6-1/8 miles. Materials were being collected for construction of road dams at 5/0 and 7/2. Construction of permanent buildings at Onukudelli was nearing completion. In diversion dam 48 per cent of excavation and 42 per cent of masonry have been completed ; 66·15 per cent of flume channel work has been completed. In tunnel pond dam excavation for foundation was completed ; masonry in progress and concreting for bucket and apron were continued. Final invert concreting of pressure tunnel was completed except 206 feet full width and 2,036 feet for right half. Concreting the side of surge shaft was progressing and 60 per cent of work was finished. Shelters were being assembled for the pipe tunnel. Concreting the side walls and final invert of flume tunnel was in progress and 76 per cent of work has been completed.

Grading of penstocks slopes was progressing. Levelling of power-house site has almost been completed. Foundation excavation for power-house, excavation of tail race and levelling transformer yard were continued. Excavation for foundation for main dam at Jalaput was progressing and 1,039 units of earth work have been done. There was not much progress during the month due to heavy rains. Total labour force during the month was 2,405.

Moyar Hydro-electric Scheme.—All the civil works from headworks to power-house have been completed. The first 12,000 K.W. set was commissioned in April 1952. Erection of II penstock line was over and the erection of machine II is nearing completion. Erection of the III penstock line was nearing completion while the work on machine III is in progress.

Pykara III Stage Extensions.—Masonry construction for the main dam in the non-overflow section and wing walls was continued ; collection of crushed sand and rubble stone was progressing. The IV penstock line was filled with water and tested terbid for leakage. Concreting of foundation for differential surge tank was completed. For the extension of Singara Power-house, work on machine foundation was progressing and erection of steel structures will be taken up shortly.

Madurai Thermal Scheme.—Work on the construction of additional cooling pond and foundation block for the 10,000 K.W. turbo set has almost been completed. Balance of turbine and boiler materials were being received, verified and staked.

South Kanara Extension.—Survey for the 33 K.V. line was completed. Plotting work was being done. Tree valuation for 110 K.V. line was progressing.

Tungabhadra Hydro-electric Scheme.—Trial pits were deepened in forebay low pressure pipeline, and surplus channels and tests conducted for ascertaining retentivity and percolation of soils. In Kamalapuram tank and tail race of the power-house investigations were being continued for plastic soil.

Profiles and pole schedules were finalised for Gooty-Cuddapah, Gooty-Kurnool and Gooty-Anantapur lines and were under scrutiny. Realignment has been completed in Guntakal-Gooty reach. Survey for Dhone-Nandyal was taken up.

Revised site plan with acquisition proposals have been prepared for Pamidi and was under scrutiny. The site plan for Bellary was also under scrutiny. Site survey was being done for the alternative site at Anantapur.

Vijayavada and Visakhapatnam Power-house Extension—Vijayawada.—Second draw water well was progressing. Work on control and repair houses was continued. R.C.C. structure work was in progress.

Visakhapatnam.—Fabrication of steel work for west side extensions was progressing. Work on south side extensions was completed except for flooring. Foundation for the VI boiler and third chimney are to be taken up.

Nellore Thermal Scheme.—Work on staff quarters at Gudur was continued. Sub-station structures at Nellore and Gudur were in advance stage of completion.

Madras Plant Extensions.—Erection of steel work for power station was 98 per cent completed. Superstructure of main buildings was 80 per cent over. Superstructure of office and control block was 80 per cent over. Work on railway sidings was 70 per cent finished. Erection of the new boiler No. 4 has been completed and the boiler is in service since May 1952. About 75 per cent of works on erection of boilers Nos. 2 and 3 were done. Erection of the 1st 15,000 K.W. turboset is in progress. Erection of transformers, C.W. pumps, etc., were in various stages of progress. Work on pump house and sub-station near cooling tower was 35 per cent completed.

Operation Branch

Hydro Areas.—Due to further improvement in the water conditions, the restriction in connecting up new additional loads over 3 H.P. was withdrawn from 15th August 1952.

The hydro systems continued to run in parallel with the Madras Electricity System. The generation at Madras was reduced consequent on the availability of power from the hydro systems which helped in building up stock of coal. The number of units generated, peak load and the services connected up during the month in the hydro system were as follows :—

Name of system.	*System peak load in K.W.*	*Generation in millions of units.*	*Services connected.*		
			Agricultural.	*Industrial.*	*Domestic.*
(1)	(2)	(3)	(4)	(5)	(6)
Pykara ..	44,500	18·407 + 6·98	42	2	161
Mettur ..	45,900	22·00	54	1	94
Papanasam ..	21,800	9·59 + *0·15	16	7	266

+ 6·98 million units were generated at Moyar power-house, the peak load being 12,500 K.W.

* 0·15 million units were generated at Madurai Thermal Station with a peak load of 3,500 K.W.

POWER

During the month, the Minister for Public Works visited Papanasam and Samayanallur on 3rd August 1952 and 31st August 1952, respectively. The Union Government Finance Minister Sri C. D. Deshmukh visited Mettur Power-house with the Chief Engineer (Irrigation) and Secretary to Government on 20th August 1952. The Public Works Department Minister of Tranvancore-Cochin State also visited Mettur Power-house on 24th August 1952.

Thermal Areas and Ceded Districts.—The Madras System was able to avail itself of relief from the hydro systems this month due to further improved water conditions in the hydro storages.

The peak load, generation and the number of services connected up during the month in the several areas were as follows :—

Name of system.	Peak load in K.W.	Generation in millions of units.	Services connected: Agricultural.	Industrial.	Domestic.
(1)	(2)	(3)	(4)	(5)	(6)
1. Madras ..	29,000	8·916	17	21	230
2. Vijayavada—					
Steam ..	8,400	3·662	..	..	..
Diesel ..	320	0·006	..	..	..
3. Visakhapatnam—					
Steam ..	3,800	1·504	..	..	..
Diesel ..	1,000	0·067	..	..	..
4 Kakinada	790	0·065	..	..	..
5 Rajahmundry	698	0·049	..	..	..
6 Srikakulam	110	0·017	..	..	..
7 Ongole ..	104	0·022	..	..	..
8 Narasanna-peta.	17	0·003	..	..	..
9 Nellore ..	1,000	0·351	..	3	40
10 Proddatur	111	0·028	..	..	17
11 Kurnool ..	320	0·100	..	3	16
12 Anantapur	186	0·052	..	..	16
13 Cuddapah	215	0·071	..	1	7
14 Nandyal ..	165	0·025	..	1	10
15 Tadpatri ..	65	0·012	..	..	..
Power purchased from Mysore.					
Hindupur ..	250	0·054	..	1	10
Ceded Districts	2,940	1·254	7	3	66

In the Madras Electricity System 69 D.C. services with an approximate connected load of 107·8 KWs. were changed over to A.C. supply on a voluntary basis.

During the month 20 extensions were sanctioned by Chief Operation Engineers (South) and Chief Engineer for Electricity at an estimated total cost of Rs. 6,87,000.

Plywood Industry

A recent review of the plywood industry carried out by the Government of India has revealed that capacity for the manufacture of tea-chest plywood has considerably expanded of late. Prospective industrialists in this field are, therefore, cautioned against precipitate action in executing their plans. Government wish to take the opportunity to notify all concerned that requests for inclusion in the approved list will be entertained only if the scheme of production has received the Union Government's prior approval.

Do You Know ?

1. The expenditure on the five-year plan will be Rs. 2,000 crores ; the plan is expected to add 12 per cent to India's national income.

2. Rice and wheat constitute 60 per cent of India's total foodgrains production, millets 23 per cent and the balance is made up by gram, barley and maize.

3. Indian production of power alcohol during the first six months of 1952 is 4,226,050 bulk gallons ; last year's total production was 3,120,000 bulk gallons as against 2,398,000 gallons in 1946.

4. The gross Central revenue collections in India for the first six months of 1952–53 amount to nearly Rs. 43 crores as against the budget estimate of Rs. 86 crores for the whole financial year.

5. The number of foreign tourists who visited India last year is 18,000, and they are estimated to have spent rupees one crore in the country.

6. The average per capita consumption of fish in India is the highest in Travancore-Cochin with 13·6 lb. per annum ; West Bengal is second with 8·4 lb.

7. The total gross land and sea customs revenue in India for the first six months of 1952–53 is about Rs. 91·6 crores as against the Budget estimate of Rs. 169 crores for the financial year.

8. Since commencement of production the Sindri factory has saved India Rs. 3·26 crores in foreign exchange, being the cost of 93,228 tons of ammonium sulphate despatched up to October 4, 1952.

9. Bombay, West Bengal and Madras have together received more than half the total quantity of foodgrains so far despatched by the Union Government. The despatches to these States are 797,100 572,400 and 4,137,00 tons respectively.

10. The annual per capita consumption of ghee in Ajmer is nearly 6 lb which is the highest in the Indian Union ; the lowest is in Assam with less than half a pound.

No Educational Concessions for Detained Students

The Government have directed that the educational concessions, granted in the Order dated 31st May 1952, to the children of Non-Gazetted Officers and others should be withheld from a pupil who remains for more than one year in one and the same class or form.

Pupils, who were detained last year and who are continuing in the same class this year, will not be eligible for the concessions. The concessions thus withdrawn will be revived when the pupil is promoted to the next higher class or form.

Plants that Kill Fish

Tiny little fishes, beginning their existence in the river waters, relish and seek only animal food—minute creatures! This exclusive non-vegetarian trait continues for a while, but later, as they grow up, they combine in their dietary both animal and plant food.

Scientific knowledge of fish life like this, so essential for the development of inland fisheries, is being investigated today at the Central Inland Fisheries Research Sub-station at Cuttack, sponsored by the Ministry of Food and Agriculture, Government of India.

At the Cuttack Research Centre, fishes are reared in nursery ponds—72 in all. At the end of summer, water is pumped out of these ponds. Their beds are cleaned, and cowdung and manure spread at the bottom. Then they are filled with water again.

Spawning Season

When, with the onset of the monsoon, the spawning season starts, thousands of little tiny spawn—about 5 to 7 mm in length—are caught from the Mahanadi irrigation canal nearby and put into these ponds for rearing. The earlier cowdung and manure bed produces enough plant and animal food for the fry.

Here, in the ponds, the fishes thrive. Additional food is supplied, whenever required, of mustard oil cake powder. When the fry reaches a suitable size, they are distributed through the State Government's Fisheries Department, to those who run fish farms.

One of the main problems investigated at the Cuttack Research Station is the mortality among the fry—its causes and possible prevention of high incidence. When the research work started, the mortality was found to be somewhere near 95 per cent. Today, as a result of continued experiments, the mortality has been brought down to about 50 per cent.

The Cuttack Research Station deals mainly with pond culture. Amongst the fish—both edible and of commercial value—on which research has been centred are varieties of Major Carp such as Catla, Rohu, Mrigal and Calhasu.

Experiments conducted are wide and varied. In rectangular cement cisterns small fry are kept for about two weeks. Their habits, feeding—everything—is watched during this period. In a small aquarium that the Station possesses, experiments are conducted on small fry. Here the problem is to determine the acid and alkali properties of water and other factors best conducive to their maximum growth.

Catching Fish with Powder

Research on the food plants of the fishes has yielded results of utmost scientific value. It has been found that some minute plants offer very useful food for the fish, while some of the big plants are positively dangerous to their life or hinder their growth.

Research scientists at Cuttack have discovered a new use for Derris powder—formerly used to kill fish. This brownish powder, derived from the root of a plant, when mixed with water in large doses and splashed in a pond, will kill all the fish. But by diluting the dose, investigations have revealed, it is now possible to catch fish easily. The dilute solution when poured into the pond water and the water churned up, makes the fish go into a partial coma. Half-dazed, they come up to the surface, scooting, belly-up, in erratic movements. They can then easily be caught in nets. However, they recover fully when thrown back into fresh water.

PLANTS THAT KILL FISH : Kumari E. Mitra of the Central Inland Fisheries Research Sub-station at Cuttack does research on the food plants of fishes. Some tiny plants are useful food for fish, others positively dangerous to fish life.

Fifty Years of Research at Samalkot

By Sri Mulukutla SATYANARAYANA, B.A., B.SC. (AG.), Deputy Director of Agriculture, II Division, Eluru

If Sir Arthur Cotton with his river projects greatly assisted the peasantry and the countryside and wiped out famine from parts of South India, another luminary that helped in no smaller measure the Indian peasant is Dr. Barber with his pioneer work on crop researches in India.

The following extract from Dr. Barber's first report on the work of the Agricultural Research Station at Samalkot shows with what object the Station was first started :—

" A disastrous disease having appeared among the canes in the Godavari delta and cultivation of this crop being in danger of extinction, the attention of Government was directed to the matter. Dr. Barber, the Government Botanist, with his experience of sugar canes in the West Indies, was directed to enquire into the matter and report on it. He found that the disease of the canes was caused by a fungus, *Colletetrichum falcatum*, commonly known as ' Red Rot '."

Healthy canes assembled in 1901 at a distant place, Hospet, that was free from the disease and planted at Samalkot and other places of the tract could not escape the disease. In his report Dr. Barber pointed out that far greater study was necessary both into the local practices and the characters of the different canes before any such introduction or acclimatisation could be attempted.

Twelve Acres of Land Rented

Accordingly in 1901, 12 acres of land were rented and to this area additions were made from year to year, till 1905, when the Farm attained the present size of 41 acres. In the research on the problem, it was discovered that the fungus causing the disease is more adaptable in its parasitism than the cane was in its resistance, and that any cane placed under a disadvantage may be destroyed by the fungus. With the application of incessant effort to the problem canes free from almost any disease could be produced in 1911–12. Attempts to distribute disease-free canes could not have rapid success as only a few ryots came forward and that too those staying nearly.

All the Government modes of advertisement were put into practice but with no marked success. An assistant was provided with a cart filled with the canes of good qualities and resistant to disease and asked to tour the interior villages, holding meetings wherever he could command good audiences. The effect was instantaneous. As many as 19 ryots came forward from one village and subsequent progress was marvellous. Out of a total of 13,000 canes distributed, nearly 9,000 went to Ganjam and Eluru, and the rest were sold to ryots in the delta.

Father of Sugar Industry

It is in the fitness of things to mention in brief at this juncture the outstanding work of Dr. Barber. He is the father of sugarcane taxonomy. He paved the way to solve many a problem connected with the sugar industry in agronomic breeding and physiological effects. Under a complicated plan, he introduced bloods of different measures from the noble canes of South India, the thin canes of Northern India, the Chinese canes of a different race and the ' Sportaneums ' which belong to the same grass family as the sugarcane. Old canes of the country have been supplanted with canes synthesised from the breeder's viewpoint, in the manner aforementioned.

This fell disease of ' Red Rot ' is prevalent throughout India. If today sugar factories have sprung up throughout India and produce enough sugar not merely to meet the country's needs but with scope for export abroad, it is primarily due to the work of Dr. Barber and others trained by him.

History of Cane Work

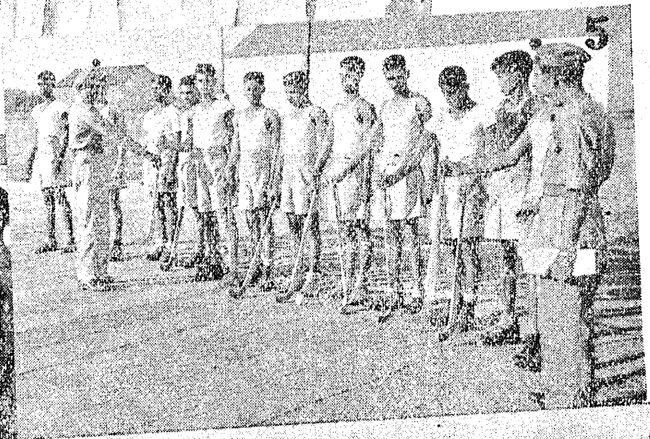
At the time when this Farm was started it was under the control of the Board of Revenue with administrative authority vested in the Deputy Director of Land Records, Survey, Settlement and Agriculture, and the Collector, East Godavari. With the implementation of the broad-minded policy of Lord Curzon, the Viceroy in 1905, the Agricultural Department was created in the State in 1904 and the Agricultural Research Station at Samalkot came under the control of the Director of Agriculture.

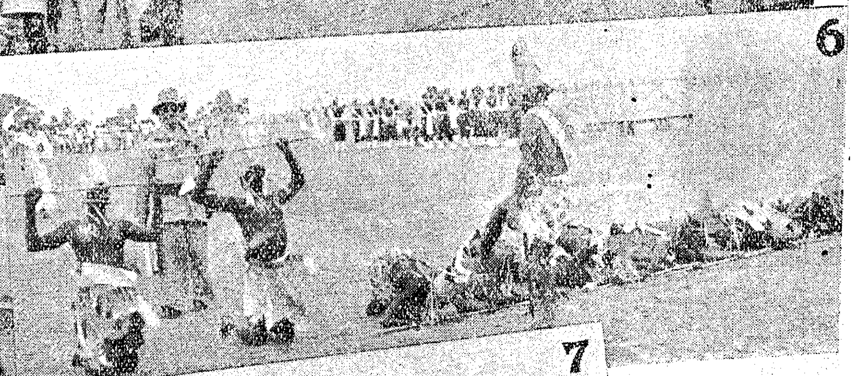
Almost all the canes of the world, from Mauritius, Fiji Islands, Queensland, Barbados, Java, etc., were assembled and studied at the station in the first decade of this century. Canes from Barbados that showed promise came for intensive study in the second decade of the century. The local renowned chewing cane, *Bangaru-theega* (B. 208) is from this stock. Canes from Java came for similar study in the third decade of the century. The seedling canes with Spontanean blood were under tests in this station in the third decade of the century. Cultures from the noble canes were in test in the fourth decade. It was at this time that CO. 419 (the child of Mr. Dutt) far exceeding in its performance POJ. 2878, the wonder cane of the world, finally put the cane industry of India on the map of the world.

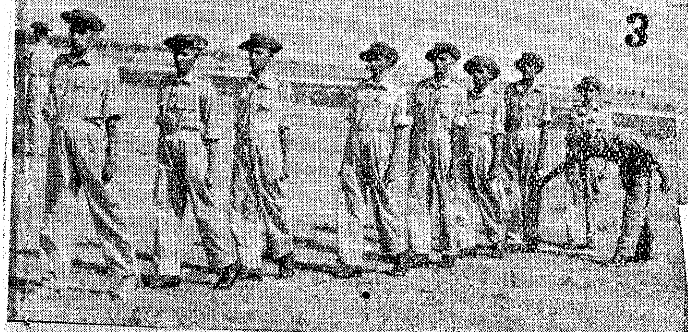
As the Godavari conditions were not then helpful for arrowing (flowering) of canes, Dr. Barber instituted his earlier researches to induce flowering and seeding in the glass-houses of the Nilgiris and later shifted his work to Coimbatore. The seedling-canes produced at the Sugarcane Breeding Station, Coimbatore, were grown at the Samalkot Station for the first time during 1918–19. J. 247 that was its main stay and CO. 213 (the off-spring of Sri T.S. Venkataraman) had all their tests on the station before they established themselves in the tract. Such was the line of work even in subsequent years with the *Jonna* hybrids, the bamboo hybrids and so forth till a Liaison Farm was opened at this place in the year 1948.

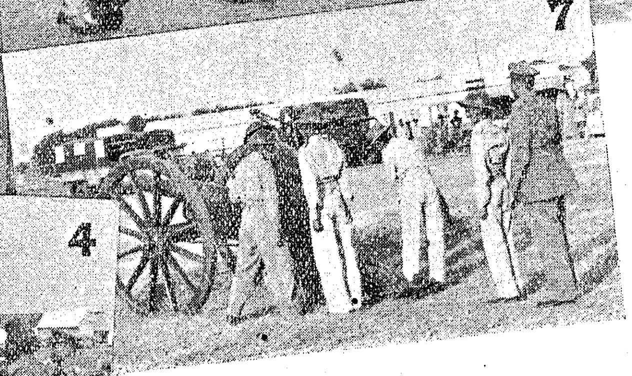
In short, the Samalkot-Agricultural Station made available canes to suit every type of land, class of ryot, varied investments in cultivation and the sugar factory. It systematised ' short crop ', line planting, interculturing, cane mills, furnace construction for jaggery-making, preparation of good jaggery, and sugar by the Khandsari process.

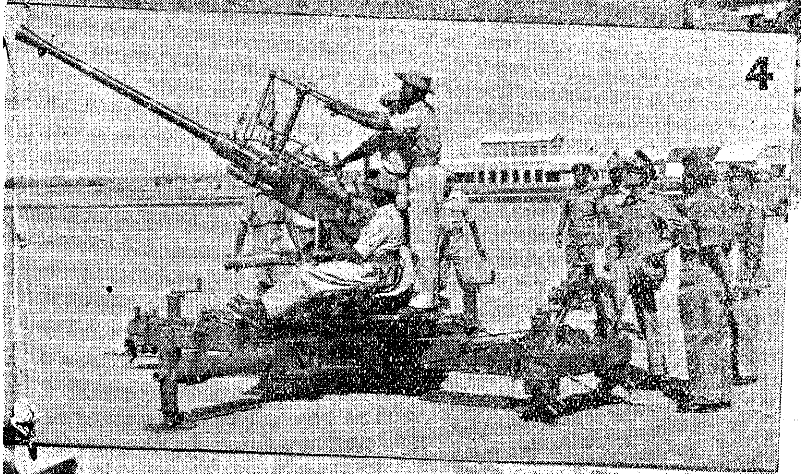
TERRITORIAL ARMY WEEK





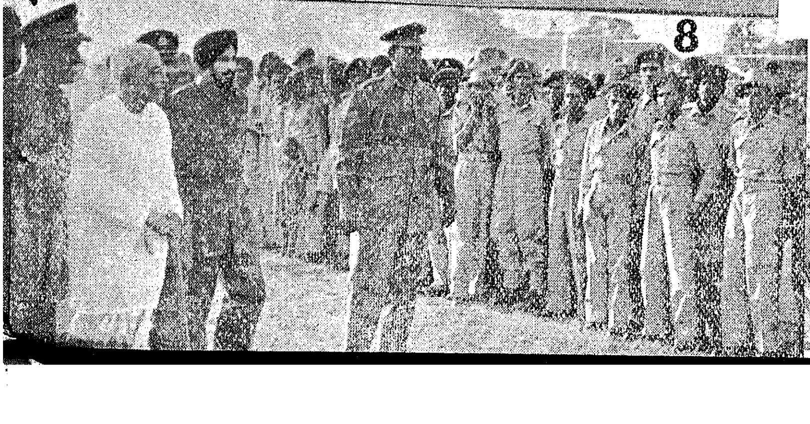






The Territorial Army Week in Madras, was held from November 8 to November 16, 1952, at the Rajendrasinhji Stadium.

Pictures show life at a Territorial Army Unit: (1) The raw recruits arrive; (2) Medical Inspection; (3) Drill; (4) Anti-aircraft gunnery; (5) Games; (6) Fancy dress on a gala day; (7) Artillery practice; (8) Sri C. Rajagopalachari, who inaugurated the Week, was received by Major-General H. M. Mohite, G.O.C., Madras Area; (9) The Chief Minister exhorted young men to join the Territorial Army and thereby become better citizens.



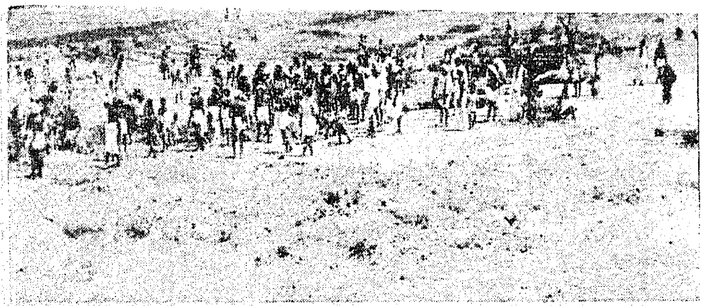
8 DEC 1952 MADRAS

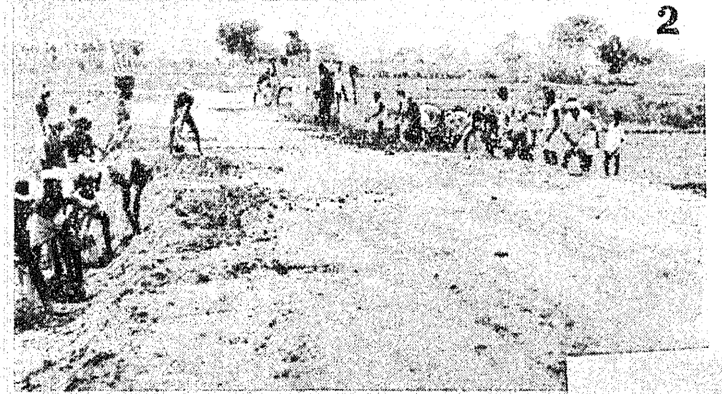
NEW LIFE AT TIRUMANGALAM

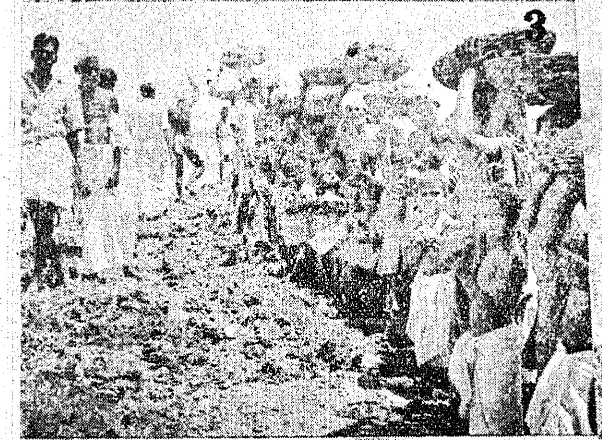
8 DEC 1952 MADRAS

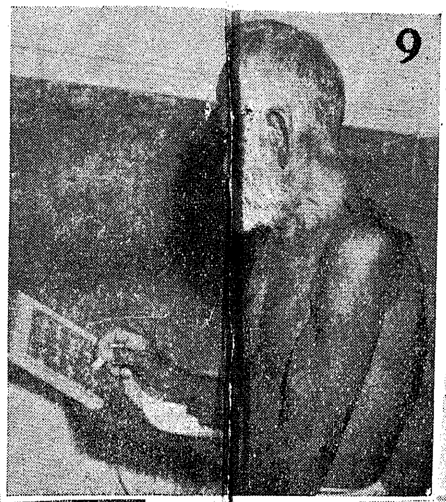
A pictorial record of rural reconstruction activities at Tirumangalam is presented on these pages. The various phases of co-operative endeavour depicted here indicate clearly promises of the new life ushered in under the Rural Welfare Scheme :—

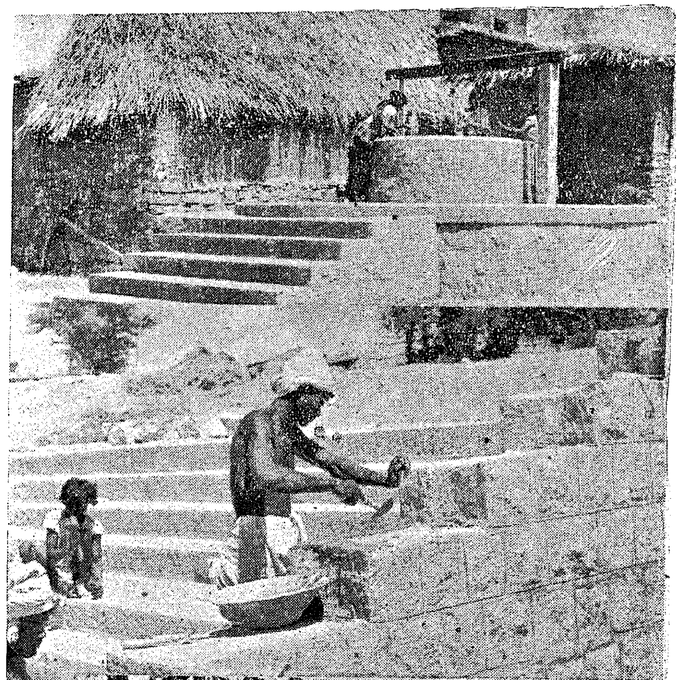
1. Improvement work in the Kallanai Tank. 2. Bunding the sides of the Orappanur Road. 3. Everybody works at Kallanai. 4. Masonry weir for the Muruganeri Tank bund. 5. Gram Sevaks sweeping the lanes at Kadaneri. 6. A smiling harvest of ragi. 7. Single-bull ghani at Kallupatti. 8. An adult education class at Thottiapatti. 9. From darkness to light. 10. Co-operative effort makes even a hard job pleasant. 11. Compost pits to turn waste into wealth. 12. News of the day—papers are read out, explained and discussed. 13. Wells like these are welcomed in every village. 14. Building steps for the tank. 15. Distant view of the tank 16. Silt was removed and a pump was fixed for the Urandaurappanur village tank. 17. Paper making section of the Kallupatti Grama Sevak Vidyalaya.

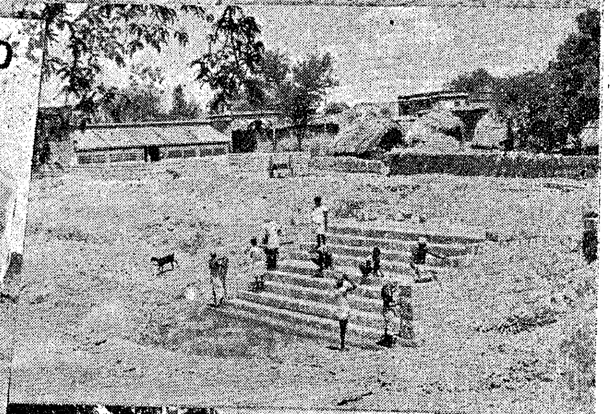


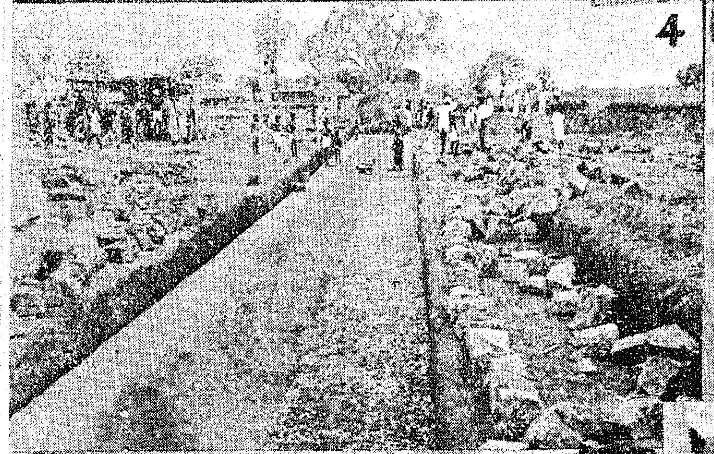


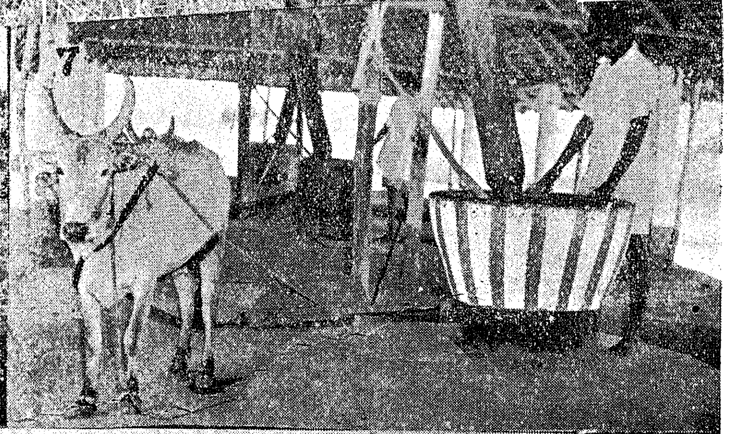


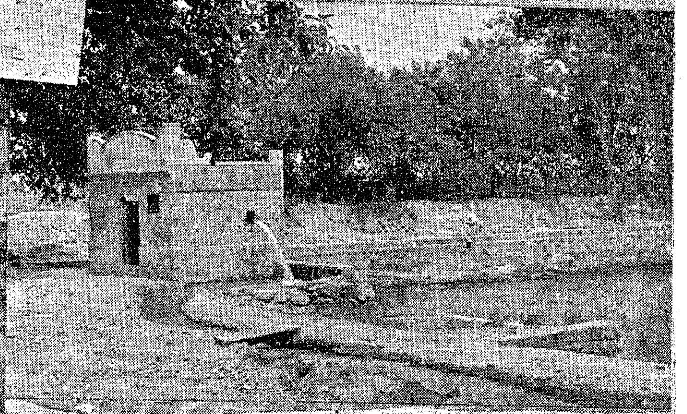


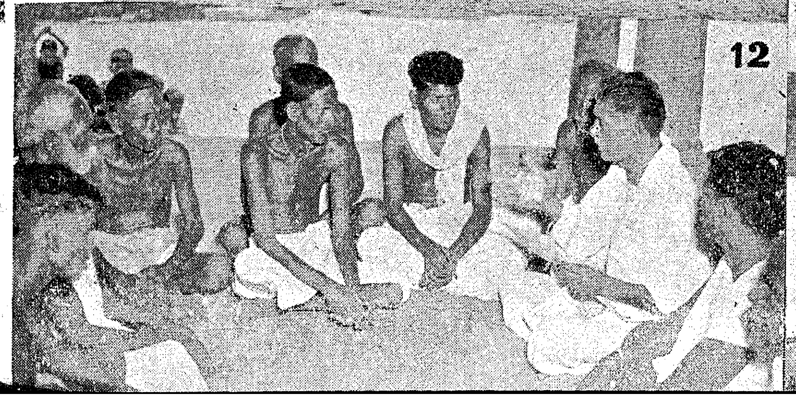


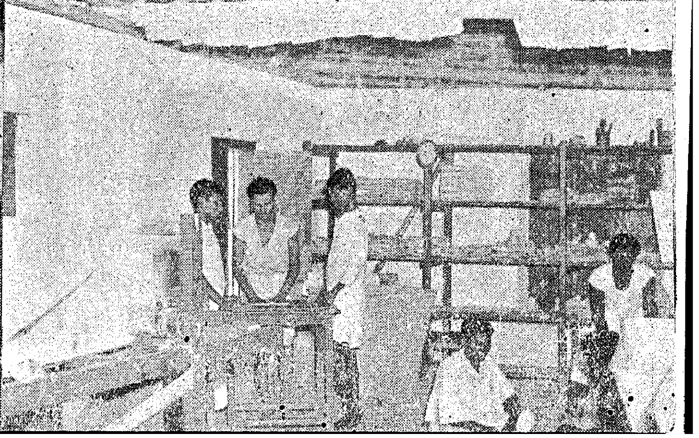








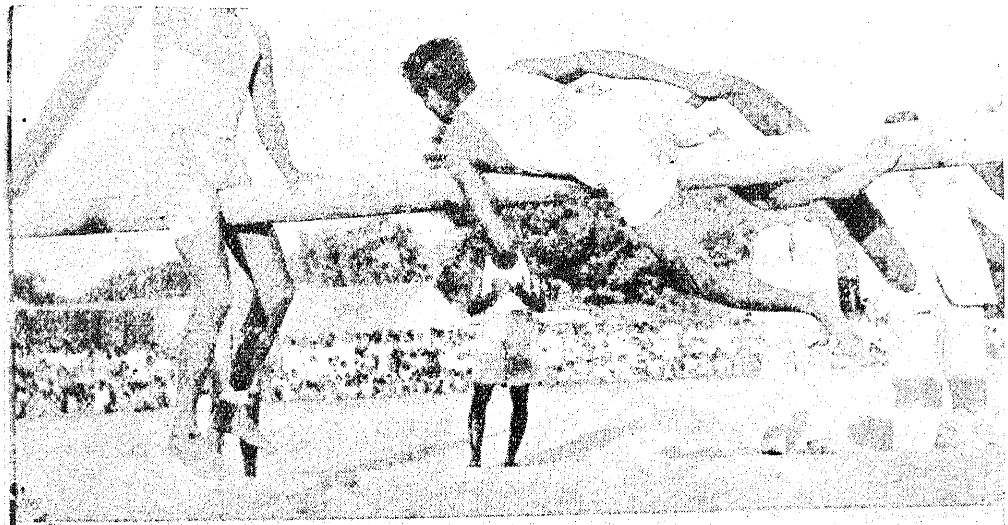




POLICE AND FIRE SERVICE SPORTS

The annual sports of the Madras City Police and Fire Services were held recently on the Pudupet maidan, Madras City. In addition to the athletic events, there was an impressive demonstration of rescue work by the Fire Services personnel.

The pictures show (*from top to bottom*) fighting on the greased pole, the stirrup pump race, the fancy dress competition, fire fighting display and enactment of a typical rescue scene.



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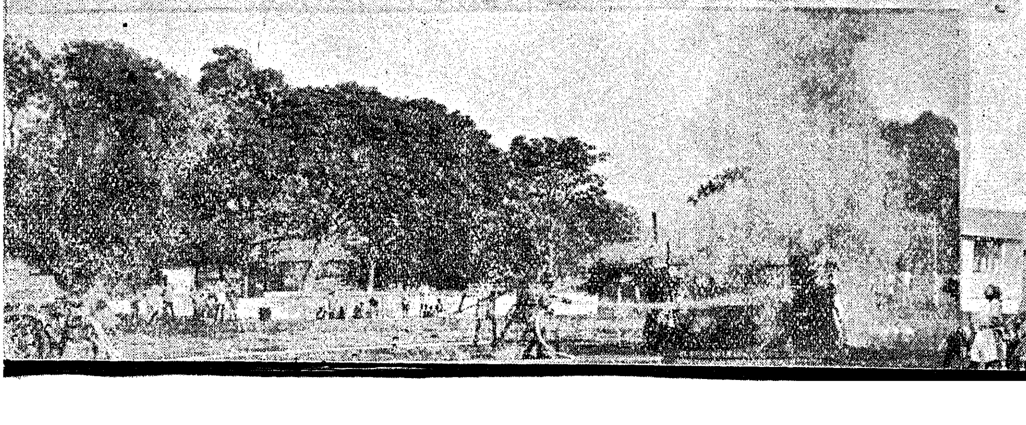

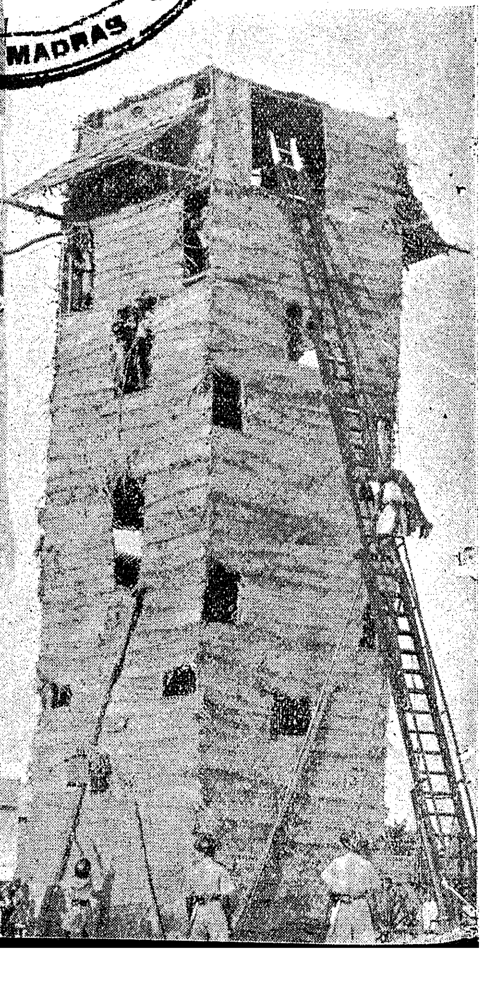

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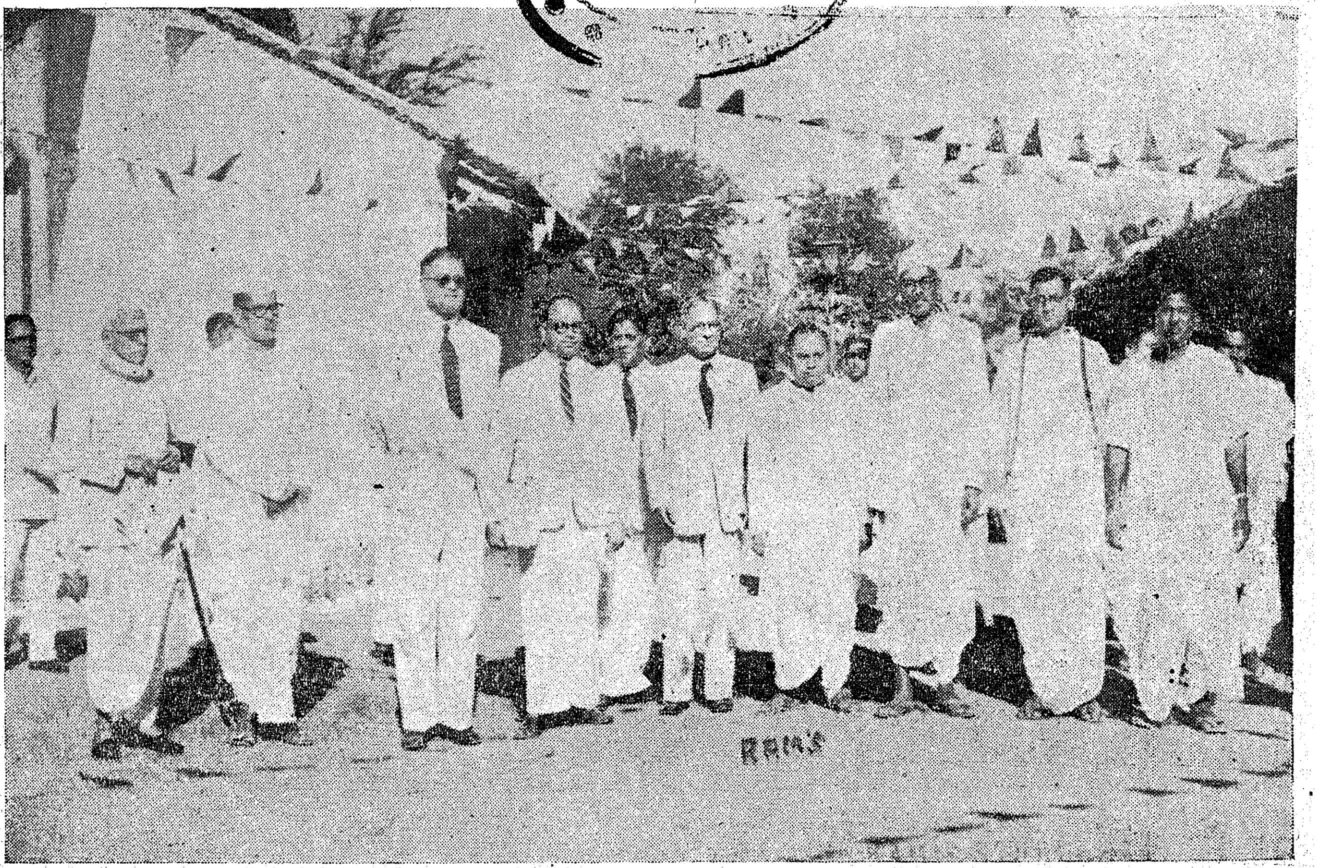


GOLDEN JUBILEE : The Agricultural Research Station, Samalkot, recently celebrated its Golden Jubilee (1902–1952). Among those who participated in the pleasant function are (left to right) *: Sri Lakkaraju Subba Rao, Sri M. Bapineedu, Sri N. S. Mani (Collector of East Godavari), Sri M. S. Sivaraman (Director of Agriculture), Sri K. Veerabadra Rao, Sri Mulukutla Satyanarayana, Sri Jilleia Venkata Bhanoji Raman, Dr. R. Nagan Gowda (Minister for Agriculture) and Sri Y. Bapanna.*

Res arch in Other Crops

Inspired by the success scored in the solution of the sugarcane problem of the tract, the cultivation of other crops like paddy, plantain, pulses, oil-seeds, fibre crops, etc., were taken up from the beginning of the third decade of this century. Mr. Hilson, an ex-Director of Agriculture, who gave the first improved strains in the crops tackled by the Department in the early years, also produced the first strain in paddy crop Rasangi No. 2, on this station. The study of the paddy crop revealed that another station complimentary in its work was required to fulfil the needs of the deltas of Godavari and Krishna, the biggest rivers of South India. Accordingly Sri Neelam Sitharamaswamy Naidu, who as Village Munsif, Samalkot, was helpful to Government in the acquisition of the present site of the Farm and who with his fund of knowledge in local agriculture and the experience he had after joining the Department, selected the site at Maruteru in 1926 in the West Godavari District.

In 1927 Samalkot issued all its material in paddy for progressive selection work at Maruteru; Samalkot, in a way, has since been catering to the needs of the higher and the middle delta regions while Maruteru with its particular lie of the land and the more sticky soil condition confines itself in its activities to the middle and lower deltas. The two are complimentary in their functions, as already stated.

Paddy.—The Samalkot Farm has issued 12 improved strains of paddy which are in extensive spread not merely in the deltas of Godavari and Krishna, but also in the Yeleru basin and in far north from Srikakulam District and in the far west in Malabar. The strains are also in study in several other districts for utilisation in the local problems of such districts. To the ryot behind the plough the time and the effort needed to evolve a strain are matters enigmatic. Sometimes the examination of a lakh of individual seedlings, from particularly assembled material and subjected to the standard tests in the course of seven years, would have resulted in nothing worth release. A twenty per cent extra yield over the local, during at least three years, has been the criterion for release of an improved strain. These eighteen strains emanating from such hard tests occupy over fifteen lakhs of acres and cater to several kinds of soil, systems of cultivation and seasonal conditions. Some of the strains of outstanding performance during a whole decade, still need propaganda and adoption for wider spread.

Release of the paddy strains Nos. SLO. 1, 3, 5, 6, 7, 9, 10, 11 and 12 by Sri Rao Sahib G. Jogiraju, of Nos. SLO. 2, 4 and 8 by Sri G. Ranganathaswamy and of Nos. SLO. 13 to S18, by Sri Mulukutla Satyanarayana cannot but be mentioned, when the paddy work on this station is thought of.

Committee on Synthetic Rice

A Committee has been set up by the Ministry of Natural Resources and Scientific Research, Government of India, to investigate the possibility of large-scale production of synthetic rice and to formulate a detailed scheme for achieving the most economical and most expeditious development in its manufacture.

The Chairman of the Committee is Sri Keshava Deva Malaviya, Deputy Minister for Natural Resources and Scientific Research, and the members are Lala Sri Ram; Sri S. V. Ramamurti, Sri P. A. Gopalakrishnan, Joint Secretary, Ministry of Food and Agriculture, Government of India; Sri S. Jayasankar, Joint Secretary, Ministry of Finance, Government of India; Sri S. Anantaramakrishnan, Sheriff of Madras; Dr. C. G. Pandit, Secretary, Indian Council of Medical Research, New Delhi, and Dr. V. Subramanyan, Director, Central Food Technological Research Institute, Mysore.

Green Manure.—A calendar of green manure crops to fit in between the several paddy seasons, in soils of different kinds, under the permanent and rotation zones and in the single and double crop lands has been evolved. Pillipesara introduced after tests in this farm is now in spread throughout all the districts of the State. Glyricidia and Sesbania in the present times give better and more quantity for utilisation in the paddy fields. Under observance of reduced seed rates, economic spacing and planting, rotations, fertiliser practice and cropping with the improved types, fifty bags (of two Imperial maunds) of paddy are now produced as revealed by the crop competitions.

Bananas.—Cultural varietal and manurial trials on bananas were pursued up to the year 1949; with over hundred varieties raised on this station. Hybridisation with the seeded and wild types was pursued. The limited size of the Farm and its multipurpose nature could not find room for the pursuit of work on this crop subsequent to 1949. A separate Banana Station, subsequently opened in Tanjore District, specialises in this crop.

The varieties assembled and raised at Samalkot were sent to the Central Farm, Coimbatore, for taxonomical studies by the Systematic Botanist.

Experimental work on banana on the Samalkot Station added several crores of rupees to the ryots of the Circars coast. In these parts, perennial gardens alone were in existence. The station introduced the culture of the crop for a period of three years on ordinary high level paddy lands. It introduced the Karpurachakrakeli for the trade against the " amrutapani " of the old perennial plantain gardens; it also introduced the " tholakari " system of planting against the usual " seethakattu ", to tide over the cyclonic damages of October-November and also lessen the period of culture by fitting in the " tella-chakrakeli " into this system. In all these ways, as much as 10,000 acres are in the annual crop account of these coastal districts. Regular export trade to stations in Bengal, Bihar, Madhya Pradesh and Orissa has been built up, not to mention occasional despatches to Uttar Pradesh. Sri S. V. Ramamurti, an ex-Director of Agriculture, helped the building up of this trade, by securing special rates in railway transport, in his tenure of office.

The improvement of the tests and the keeping quality of the several varieties were also studied.

Figs were prepared out of Tella-chakrakeli, Karpura-chakrakeli and Mauritius, Sirumalai and Yenuga Arati. Figs prepared from Tella-chakrakeli are the sweetest and the best.

Sunhemp Scheme.—A five-year scheme of the study of the sunhemp crop for fibre production was taken up during the year 1937–38. A series of experiments were conducted during the five years with several varieties of different durations, from various parts of India, to know the proper time of sowing, the optimum seed rate, the effect of application of different kinds of manure and the state in the growth of the crop at which the harvest is to be effected, for the best yield and quality of fibre. Various methods of retting were also tried to secure fibre of good colour and strength.

Sunhemp seed for fibre production is obtained locally from parts of Orissa. The experiments in the scheme worked out during the five years showed that the type Cawnpore No. 12 was best from all viewpoints. With the war and financial stringency work was stopped from 1942, at the stage when this type should have been spread into the sunhemp fibre producing tracts of the State.

Pulses.—Studies in greengram, blackgram, redgram and soya beans were undertaken from 1935–36. Material from this Farm was transferred in 1943, for work at the Pulses Research Station opened at Vizianagaram, for the northern district.

Other crops.—In the period of the economic depression the cultivation of various crops like Egyptian cotton, Cambodia cotton, linseed, wheat, onion, groundnut, etc., in the rice fallows and as alternatives to paddy were tried with varied success. The Punjab-American cotton, the type 216 F and groundnut in the rice fallows are now successfully grown and they hold their own with the assertion their prices induce in the commodity market.

Coconut Nursery.—With earlier beginnings with choice material and the avenue planting in 1941 from the approach to the Farm, the foundation was laid for work on coconut. A comprehensive scheme for the distribution of selected coconut seedlings under the auspices of the I.C.A.R. and the Madras State is now in operation and over 20,000 coconut seedlings are being annually distributed to meet the requirements of ryots.

Co-ordinated Crop-weather Scheme.—This scheme was started in 1950 and is now in operation on paddy and sugarcane, to find out the influence of the weather elements on the growth and yield of the crops and the incidence of pests and diseases. The Farm is equipped for the purpose with a small meteorological observatory.

Buffalo-herd.—The care and management of a buffalo-herd for the dairy and draught work and for stud to

improve the local stock, continued on this station, till 1922, when the herd was transferred to Lam at Guntur, with the acquisition of a farm at that place in that year.

The Laboratories

Small laboratories were functioning, the biological for sunhemp work, the chemical for sugarcane work and the pathological for plant protection work. Recipes to tackle plant pests and diseases in these districts were standardised with work by a Mycological and an Entomological Assistant stationed at the Farm till the year 1945. With the experience derived from the Farm Apiary bee-keeping schemes were worked, for the extension of this side industry to farming, in East Godavari in 1930 and in West Godavari in 1940. The present Government Entomologist Sri V. Thirumalarao who was long connected with this station was responsible for most of these activities.

The Juvenile Labour School: It has been realised that the proper village guide for agricultural work is the actual worker on the Farm for the long years. One want to be supplied to this class is education. To meet this need and to possess the trained personnel, for the cadre of maistris, the sheet-anchor of the activities of the Department in the villages, a Jevenile Labour School was started on the Farm, in the year 1948 under the perseverent effort of Sri Mulukutla Satyanarayana, the Farm Manager at the time. While in a flourishing state, the school was ordered to be transferred to the District Board in 1951–52.

Training of Personnel: The station has been functioning as the training ground for agricultural and rural work for members of several departments, ever since its start. Training has been imparted to several batches of maistris, fieldmen, school teachers, Tahsildars, Revenue Divisional Officers, I.C.S. and I.A.S. probationers and several more.

Another achievement of the year 1942 was the opening of a post-office on the Farm to cater to visitors and the residents on the Farm.

Lines of Work

Lines of work discontinued or yet to be undertaken, for which the expansion of the station in extent and equipment are the primary needs :

With 41 acres owned by the State and 16 acres held under lease from 1913–14 to 1948–49, the extent of the Farm for a long time used to be 57 acres. From 1949 the Farm has only the present extent of 41 acres. To meet the dire needs of the experimental technique on problems relating to the staple crops of the Division, Government sanctioned the acquisition of adjoining land to the west of the Farm in 1939, to make up for a total of 1,000 acres. The amount required for the acquisition was also provided in the Budget of 1939–40. With the outbreak of World War II in September 1939, the acquisition proceedings by the Revenue Department came to an end.

The first soil survey for a Farm of this State was conducted for Samalkot in 1941–42. The Government Agricultural Chemist who conducted the survey reported that the land proposed for acquisition would be fit for manurial and other experiments, the existing Farm land and that proposed for acquisition differing only in the added fertility of the former under departmental treatment.

Better Farming

With assured water-supply for 11 months in the year and the varied nature of the Farm soils permitting farming under dry, garden and wet conditions, problems of many a kind relating to the crops under cultivation in the uplands and delta of the east coast can easily be tackled. The following have yet to receive attention on the station, to establish better farming in the districts and secure greater returns from agriculture :—

1. The waters of the Rivers Godavari and Krishna flow to waste from November to the middle of January, as the adverse weather conditions of the period preclude the raising of paddy crop in between the 'sarwa' and the 'dalva' seasons. This problem of the intermediate season paddy has been engaging the staff of the station during the past four decades. Neither soil treatment, nor the evolution of a paddy type to fit in the period, could meet with success. As the solution of this problem will benefit fifteen lakhs of acres, this has to be pursued till success is met.

2. Types of paddy have to be evolved and systems of cultivation defined to suit :

(*a*) Replanting of areas devastated by unexpected floods from the rivers and uncontrolled streams as Budameru, Thammileru, Rallamadugu, etc., in the months of August and September.

(*b*) Planting of tank ayacuts receiving belated water supplies from October onwards.

3. Evolution of types from dry paddy varieties to suit the Agency and Uplands.

4. Evolution types to fit in the semi-dry system of paddy cultivation started with drill sowings and intercultured by bullock hoes.

5. Evolution of types to withstand the stem-borer and "kedu" and to suit swamp, flood and salinity.

6. Standardising the culture of canes, to meet varied investments, for producing jaggery of good grain, colour and keeping quality for the soils of the Yeleru basin and of the Godavari and Krishna deltas that support five sugar factories.

7. Studies in plantain to secure ripening every month to meet the market needs uniformly.

8. Bio-chemical and agronomique studies in plantain to preserve the quality of fruit for more than a week to withstand transport to the farthest ends of the country.

9. Systematisation of crops in rice fallows.

10. Fundamental soil fertility studies to arrest depletion of plant floods through forced cropping and arrest deterioration in the crumb structure of the soils.

11. The continuance of the sunhemp fibre studies; seed multiplication and distribution of Cawnpore No. 12.

Problems are in legion; resource is not lacking to wrest out wealth from the land. Men and materials require to be provided.

The centre of gravity of food production for the Madras State to keep its population going, lies at the present time in between the Godavari and Krishna deltas. Any attention to this zone endowed with Nature's blessings will increase the outturn of food and availability to other zones at relatively cheaper cost.

Farming in Japan

By SRI H. G. PATIL, Superintendent, Agricultural School, Kospad

Many things in Japan impress a visitor. But nothing more than the way the industrious farmer goes about his job. It would surprise many if I say that excepting in the low-lying paddy lands, the soils of Japan are generally poor, much more so on hill slopes. Yet, with a lot of hard work, skilful management of soil and by supplementing rains with irrigation, the Japanese farmer succeeds in raising good crops generally.

Analysis of the soils of Japan shows that they are generally deficient in phosphorus and potash. But the productive capacity of all soils is maintained at a very high standard, thanks mostly to what the farmer does to his land. He never thinks of raising a crop without adequately manuring the land first with compost or other manures. The soils are thus given no opportunity to get exhausted. The climate in the country favours agriculture, and the farmer with his system of following rotational cropping and improved cultural methods, keeps up the standard of fertility and raises big crops.

The country is mountainous and only about 16 per cent of the total land area is available for cultivation. But every inch of this is brought under cultivation, and no land is allowed to lie fallow or unproductive.

Terracing

Most of the hill slopes are skilfully treated for the raising of crops. A great amount of labour is spent in the construction of high terraces even on steep slopes and new fields are fashioned out of these. Where the steep is great, the farmer constructs stone walls raised four feet to six feet high round the terraces. To guard against soil erosion on such slopes, the water outlets are paved with stones. A variety of crops is raised on these terraces, offering a picturesque sight to the eye.

The famous 'Unshu' oranges in Shizuoka are mostly grown on stone-walled terraced fields, and a single row of trees is grown on the terrace. Other fruits are also grown on such land, and since rainfall is received throughout the year, no irrigations are needed for the crops.

No Fences

Surprisingly enough, fields are not fenced in Japan. Land is limited, and the farmer does not like to waste any available space. Bunds are used for the growing of crops, and so no space is left for fences. No stray animal problem exists for the farmer, however, because animals are never let loose to graze. When animals are to be taken from one field to another, the farmer secures mouth-pieces on them so that they may not damage the crop of his neighbour. He has great respect for another's property, and hence there are no thefts of crops and no damages done to them in any way.

Even children have developed this trait, they neither pluck fruit from another's garden, nor even damage trees or plants intentionally. Hence, farm protection is rendered unnecessary, and the only demarcation between one farm and another is the narrow strip of uncovered land between them. There is no encroachment on one another's land and disputes, if any, are settled amicably. Taking the land dispute to courts is thus unknown in Japan.

Farm Roads

Every farm in Japan has well laid-out roads for transporting manures and farm produce in hand-carts. Roads are innumerable on a farm, no two fields being without a road. One remarkable thing that the farmer has done is to exchange bits of land with his neighbour to make his fields all rectangular, with the boundaries in straight and parallel lines. Straight fields and straight roads offer a beautiful and pleasing sight. When a road has to be newly laid, the farmers join together, plan the new road, and when the alignment is over and the pegs are driven in, every farmer whose lands are affected gives up the bit which will be covered up by the road without a hitch.

I saw a road being constructed by the side of the farm-house where we were staying, and was struck with the smooth way in which the farmers all joined together and agreed to part with bits of their own lands on which the road was to run. A small fund was raised with each farmer contributing to it according to his capacity, and this was used for compensating those who had given up the required pieces of land.

Specialised Art

Agriculture in Japan is horticulture. Every inch of the ground cultivated is given a thorough tillage. You cannot find a neglected bit of land or a half-hearted attempt at cultivation anywhere there. The fields are very well weeded indeed. No weeds are to be seen in a field of crop. This is, indeed, creditable, considering that most of the tillage is done by hand. The countryside looks like a vast well-worked garden.

The soil is dug by hand with a long fork, which penetrates well into the moist soil. It is turned over and later on worked to a fine tilth. Except rice, all crops are grown on ridges. The ridges are worked by hand-hoes and other hand tools. Inter-culturing is done by the hand fork, and the crop is earthed up from time to time. When the ridges are occupied by one crop, the furrows are dug over for inter-crops. Before the crop on the ridges attains maturity, the crop on the furrows is sown in straight lines and at regular intervals. After the ridge-crop is harvested, the crop in furrows comes up. Later, the ridge is dug over and the crop in the furrow is earthed up. In course of time, the furrow becomes a ridge, and what was once the ridge becomes a furrow. A crop is sown in the new furrow in the same way and at proper time. The process continues the year round. Thus not only is the soil kept well-pulverised but the best returns are taken from the land by not wasting time in waiting till the harvesting of the first-sown crop.

After Wheat

In the uplands, wheat is harvested in May. In April either tobacco is planted or groundnut or soya bean is sown in the furrows between the wheat lines. Sometimes,

rice is also dibbled between these lines. Thus, the inter-crop gets a month's start by the time wheat is harvested. Wheat straw, after the crop is threshed, is buried in the furrows where the new crop has been sown, and covered with the earth from ridges on which wheat was standing. In this operation, organic matter is added to the soil, the soil itself is pulverised and aerated, and the new crop gets an earthing-up.

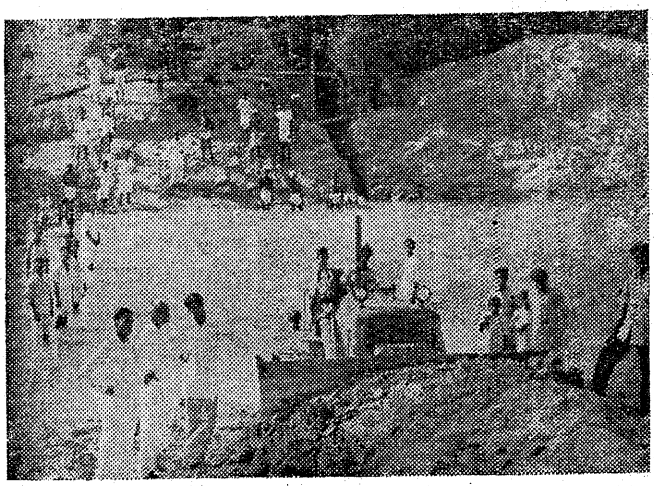
In the case of wet paddy, where the soil is deep, the moist stubble soil is turned over into deep blocks with the long fork in April-May. In the winter, 30 to 40 per cent of the wet rice fields are utilised for the growing of winter crops like wheat, barley, etc. The surface soil is drawn up into high and broad ridges on which two rows of these crops are grown. The ridge is naturally well drained, and this favours the growth of the new-sown crop. The job is quite strenuous, but nothing will beat the farmer in his patience and hard work. These ridges are levelled up after the crop is harvested in May, and the soil is got ready for the rice crop.

Neat Plots

The neatly-laid small plots with straight rows of plants are typical of Japanese agriculture. The usual practice of sowing is dibbling of seed at regular interval and in straight lines, and broadcasting is done only for raising a rice seed-bed. The straight lines save seed, and permit easy inter-culture and manuring which are done several times during the life of the crop. Tillering is encouraged, and plants get enough space, sun-light and air. The system permits of a second crop being sown when the first is still in the field. Individual attention to plants can also be paid in such a system. In the field, stones or weeds are rare. All stones are carefully picked up and put on the field borders to prevent soil being eroded. On the hill-sides they go to form the terrace walls. Fields are levelled perfectly, and one never comes across a field with an uneven surface in Japan.

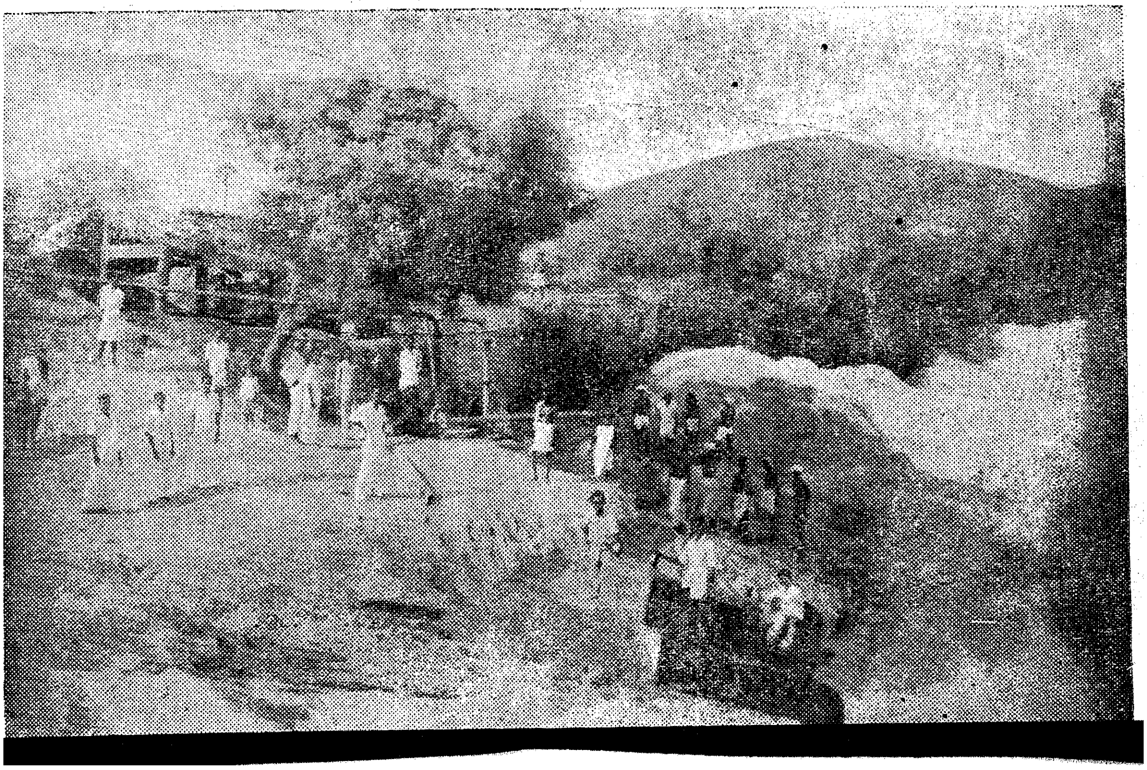
The Japanese farmer improves sticky soils in texture by adding to them sandy or red soil from the hill slopes. Leaf-mould is available in large quantities in the innumerable private-owned forests there. It is collected and applied to such soils or those which are poor. The continuous addition of leaf-mould to the soil for generations has enabled the farmer in Japan to increase the fertility of the soil.

(The Farmer).



HELP TO RYOTS: Finishing stage of the clearance work at Kavetipuram. Two oil-engines hired out by the Agricultural Department are being engaged in pumping out water for the crops. This is of immense help to the ryots of the place affected by seasonal conditions.

RIVER PUMPING INSTALLATION: A kasam (spring channel) in Kavetipuram, Chittoor District, was cleared and deepened by a bull-grader belonging to the Agricultural Department. Before the work was undertaken, only 15—20 acres could be irrigated with the water-supply available and even that for one season only. Now two crops of paddy can be raised over 40—50 acres in the village. Picture shows the clearance work at the beginning stage.



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Scientific Blending of Natural Food Components

By Dr. V. SUBRAMANIAM, D.SC., F.R.I.C., F.N.I., Director, Central Food Technological Research Institute, Mysore

The blending of different components such as starch, proteins, fat, etc., so as to conform to our requrements and dietary habits offers several practical problems, and it is in this direction that considerable amount of technical and engineering skill is needed. The resulting products should also be very cheap, easy to handle, transport and store for reasonable periods.

During 1949, the Food Technological Research Institute in Mysore made rice-like grains out of maize and jowar. So far all known attempts have been directed towards the production of grains like rice, which is in short supply and generally the other grains have been used for the purpose.

Although tubers are potent sources of starch, they have not so far been utilised for the above purpose for two reasons: (1) The tubers contain starches which by themselves cook to soft, glassy and sticky products which are not acceptable to grain eaters. (2) Most tubers are deficient in protein and cannot by themselves replace grains. Even when the proteins are obtained from other sources, the blending offers difficulties.

Principle and Procedure

It has been shown by different workers that the nutritive value of tubers—particularly that of tapioca and sweet potato—can be very much improved and even raised to a higher level than grains through incorporation of seed-cakes, particularly those of groundnut and coconut. The work done in the Food Technological Research Institute has shown that about 10 per cent of such a cake incorporated with tapioca or sweet potato flour, together with calcium in some suitable form is sufficient to produce an over-all nutritive value which is somewhat higher than that of rice.

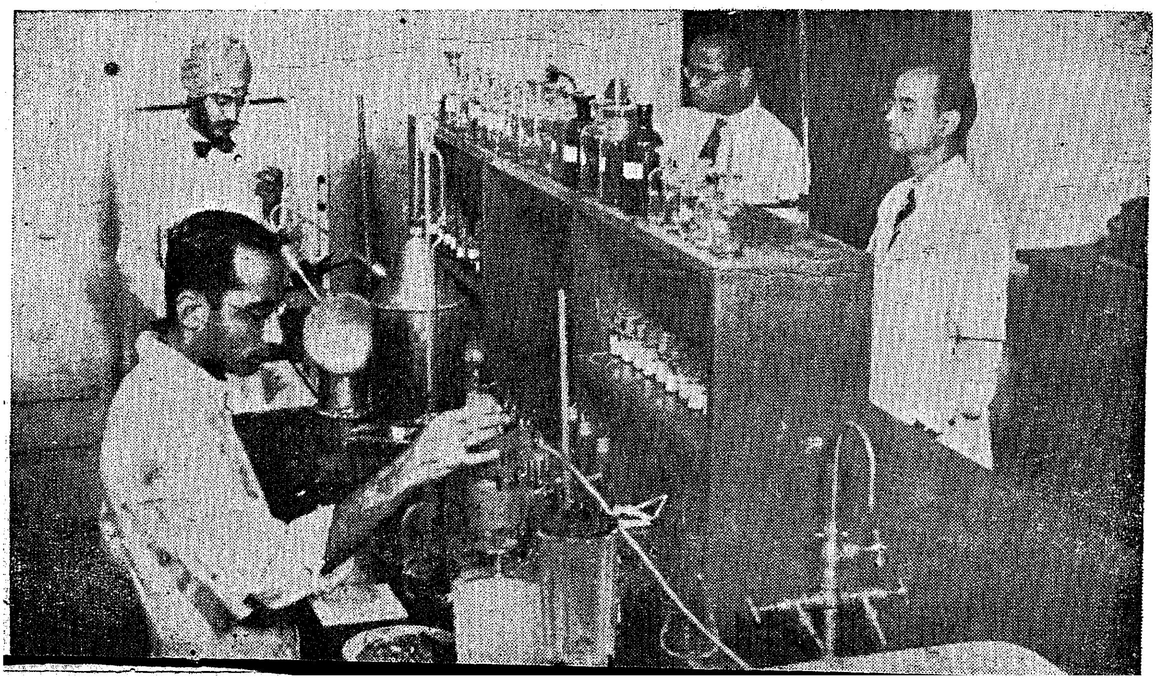
The technical problem finally resolved itself into that of correctly blending the tuber material with the cake and calcium and then processing the mixture to obtain a hard grain that can be cooked and consumed the same way as rice. After overcoming the various difficulties, the procedure that was ultimately developed in Mysore may be outlined as follows: Mature tapioca tuber is cleaned and both the outer skins are removed. It is then cut into chips which can be dried in the sun or a drier. The chips should be well dried so as to facilitate long storage. To make the grain, the chips are ground to fine flour and to 90 parts of this flour 10 parts of specially prepared groundnut cake well stirred up with 80 parts of water are added.

It is very important that the groundnut cake should be well incorporated with the tapioca flour. Calcium in the form of creta or a soluble salt like chloride is added along with the cake suspension. The dough is then rubbed over sieves when it breaks into fine granules. These granules are then transferred to trays which can be shaken either by hand or by machine. During the shaking, round grains are formed exactly in the same way as in sago manufacture.

Cooks More Easily than Rice

The grains are white to yellowish white in colour, but as such they have no strength. The required toughness is imparted by roasting the grains, preferably in a closed

SEARCH FOR NEW FOODS: Processing groundnut milk at one of the laboratories of the Central Food Technological Research Institute, Mysore. The Institute aims to secure through the services of food technology a better conservation and more efficient utilisation of food material available in our country.



atmosphere, when the starch gelatinises and blends well with the protein. Subsequent drying accompanied by a short period of dry roasting yields a grain which is as hard as rice and can be cooked in the same way.

To cook the grain, the best procedure will be to bring five parts of water to boil and then drop one part of grain into it, preferably in instalments so as not to interrupt the boil. The subsequent operations are the same as in the case of rice. The grains are stirred and samples examined for cooking. Usually the cooking is complete in less than eight minutes which is about one-third of the time it takes for rice. The gruel, which should be thin, is then drained out and the grain is ready to serve. The cooked grain has the desired taste and flavour and can be served with savouries, sweet, etc., according to requirement.

Investment and Cost of Production

The related processes have been worked out and the equipment designed so as to be worked either on a cottage scale or in a factory. With a capital of about Rs. 7,000 a small-scale equipment capable of producing 3 to 5 cwts. of grains per day can be set up. At a cost of about a lakhs of rupees, improved types of equipment designed to produce five to seven tons per day can be set up.

Tapioca is preferred to sweet potato as the raw material because of its colour, neutral taste, and easy digestibility. Sweet potato has a tendency to turn dark and spoil more quickly. Tapioca can be grown on even poor soils and the yield ranges from three to ten tons per acre. On an average, we can expect at least three times as much of dry food per acre in the form of tapioca as of grains. Approximately three tons of tuber will yield slightly over one ton of grain. Groundnut cake of the desired quality can be obtained at about Rs. 300 per ton. It is reckoned that with the processing, the cost of the finished grain will not exceed 2½ to 3 annas per lb. With improvements in production and processing, the cost will come further down.

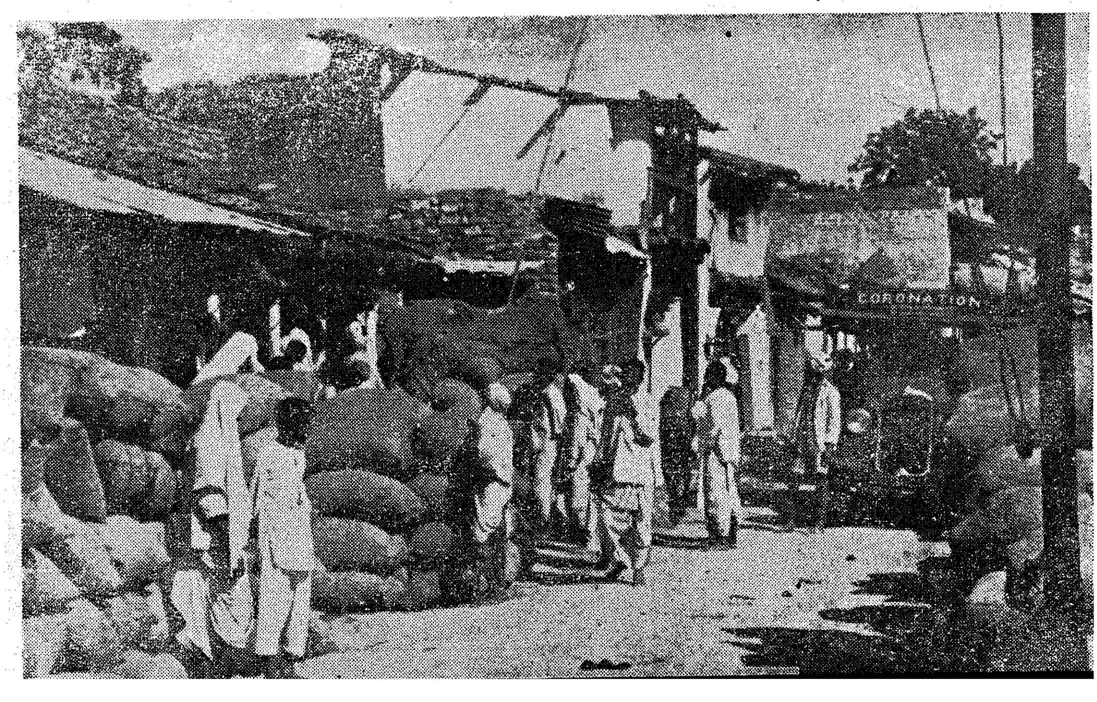
The advantages of such a processed product are fairly obvious. We can produce at least three times as much food per acre as we are now able to obtain. If it is applied on a sufficiently large scale, the country will save huge sums of money which are now being spent for purchasing food from abroad. There will be nation-wide development of a new activity and there will be more production work and employment. The savings can be utilised for other developmental projects, resulting in improved living conditions for the people.

Travancore-Cochin has at present a large deficit of foodgrains which has to be met from outside the State. The State has an abundance of the tuber and can produce a great deal more if there is an incentive for production. By partial utilisation of the tuber for processing, both the grower and the consumer will benefit and the money that would have been spent on the purchase of grains would be saved.

The progress in Travancore-Cochin will be watched with great interest not only by the rest of India, but also by the other parts of the world which are similarly placed in regard to foodgrains. Madras, Mysore, Bombay and Hyderabad can easily follow as they not only have the facilities to grow the tuber, but also an abundance of groundnut cake which can be used for the purpose. The use of the cake, even partially, for food processing, as is already done in other countries, will be a stimulus for the production of good white cake free from the outer skin, grit and other impurities.

The concept of the synthetic grain is based on a well-known scientific principle. The processing today appears to be novel because it has not so far been attempted. In course of time, however, it is bound to develop and several improvements will follow. It is not too much to predict that the synthetic grain of tomorrow will be more attractive and more nutritious than any of the natural grains. The first process developed by Indians is now being given free to the world.

GROUNDNUTS IN INDIA : Bags of groundnuts ready for transport at a village market. India grows a great proportion of the world's oilseeds. Groundnut cake is used in the manufacture of synthetic grains.



Gosamvardhana

India has been known for centuries for the high regard and respect she has paid to 'mother cow' whose protection has been an article of faith with the Hindus. According to Hindu mythology it was during this period of the year that Lord Krishna, protector of the cow, saved Brij Bhoomi (Mathura-Brindaban pasture land) from the wrath of Lord Indra who, out of arrogance, tried to deluge the whole area by a torrential downpour. Lord Krishna raised the Govardhan Mountain, sheltered millions of cows and herdsmen underneath it and saved them from inundation. It was on Gop-Ashtami Day that Lord Krishna, who was formerly only a keeper of calves, became a cowherd and assumed the title of 'Gopal'. Emperor Dalip, a forefather of Rama, offered his own life in lieu of his preceptor's cow, Nandani. Arjun courted exile for twelve years in order to rescue a Brahmin's cow.

Recognizing the intimate bearing of cattle welfare on the prosperity of "this land of milk and honey", our ancestors set apart a few days in the year to focus public attention on the part the cow has played in national economy. It has been customary since then to celebrate the Gop-Ashtami or Gosamvardhana Week, commencing on the first of the Kartik month of the Hindu Calendar.

Reorganising Gaushalas

Several countries in the world have been inspired and prompted by India's ideal of cow worship, and, emulating her example, have achieved notable success in cattle development by modern scientific methods. Taking the cue from the great heritage of gaushalas (home of cows) and pinjrapoles (place for disabled cattle), handed down to us as symbols of the depth of India's reverence and devotion for the cow, the Government of India established in 1944 a Cattle Utilisation Section in the Ministry of Agriculture. Its aim was to reorganise these institutions on utilitarian lines and take other steps for improving the cattle industry.

India is predominantly an agricultural country and cattle play an important part. Bullock-power is available for the various agricultural operations and for a large majority of the people the only source of animal protein in their diets is milk and its products. It has therefore been rightly said that the cow and the working bullock bear on their backs the entire structure of the country's agriculture.

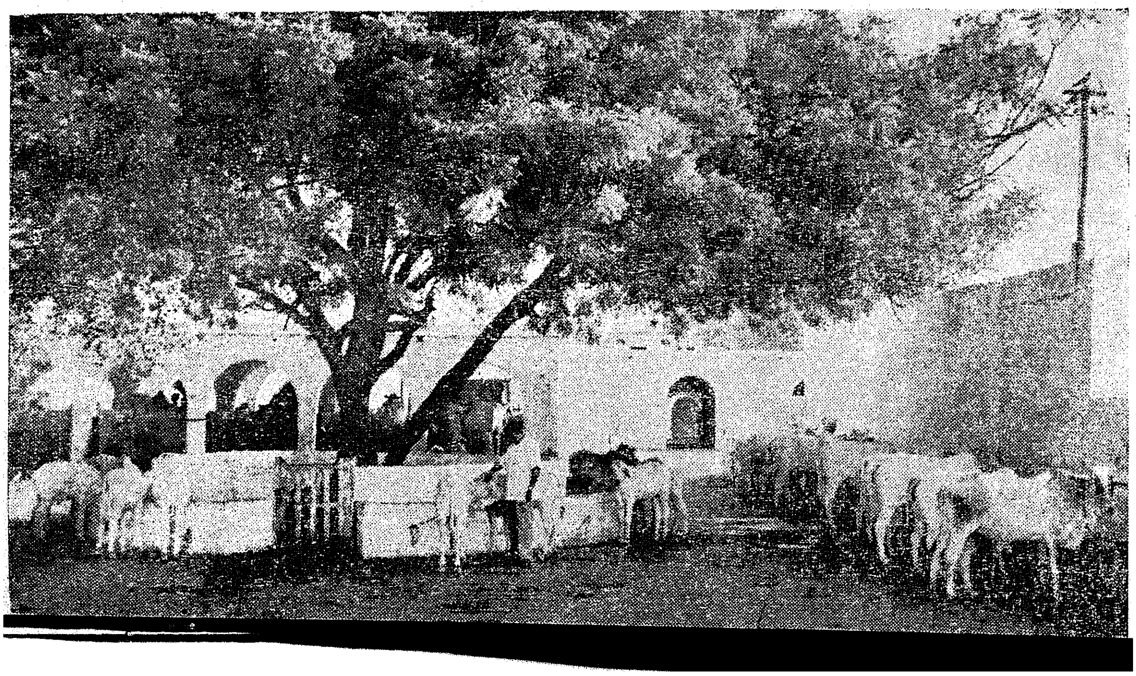
Though India has over 18·5 crores of oxen and buffaloes, the production and consumption of milk and its products per head in the country is probably the lowest. This is due to the low productivity of the Indian cow.

Milk and Breeding Centres

It is estimated that there are at present 3,000 gaushalas and pinjrapoles all over India maintaining 600,000 head of cattle at an annual cost of about Rs. 7 crores met from private charities on a voluntary basis. It was primarily with the object of arresting any deterioration of the cow as a giver of milk and protecting her from indiscriminate slaughter, that these gaushalas and pinjrapoles were founded from time to time during the past two centuries.

After a hurried survey, Government found that these institutions apart from being merely concerned with humanitarian activities, could, if organised on proper lines, supplement their efforts by converting themselves into milk-producing and cattle breeding centres. Though suffering from apparent drawbacks, they could serve as sanctuaries for the preservation and betterment of the cattle wealth of the country. They could as well provide asylum to milch cattle from cities and towns during dry periods.

MODERN PINJRAPOLE: The young stock belonging to the Delhi Pinjrapole. This is what a pinjrapole can achieve under the improvement plan.



Mohwa Hand Decorticator

The Indian Central Oilseeds Committee have announced that the last date for receiving entries for the competition in respect of the best model of Mohwa Hand Decorticator has been extended up to February 28, 1953, by which date full particulars regarding the design, performances, etc., of the decorticator should be sent by intending competitors to the Secretary, Indian Central Oilseeds Committee, Room No. 345, Block No. 9, Shahjahan Road, New Delhi.

Because of a wide diversity of conditions, it has not been possible to work out a common plan for all the gaushalas and pinjrapoles, but a model scheme has been drawn up. Efforts have been made to bring the various gaushalas and pinjrapoles in each State together under a non-official federation and to have a uniform standard of working. The Government of India this year constituted the Central Council of Gosamvardhana, in replacement of the Gaushala Development Board set up in 1949, for greater co-ordination of the activities of these institutions throughout the country. A corporate body registered as a society, the Council consists of Members of Parliament, and representatives of the Central and State Governments and Gaushala Federations. Under its purview come all measures necessary for Gosamvardhana, including the setting up of key village centres for cattle-breeding on scientific lines and gosadans for infirm and decrepit cattle.

Key Village Scheme

The key village scheme envisages, among other things, the setting up of a network of 600 model villages in suitable localities all over India, the programme including the (1) castration of all scrub bulls and their substitution by those of approved breeds, (2) adoption of the technique of artificial insemination to make the widest possible use of available superior bulls, (3) establishment of calf-rearing farms, (4) control of animal diseases and (5) introduction of improved fodder.

The Gosamvardhana Council has also undertaken the opening of gosadan segration camps for unproductive cattle. This is an adjunct of the scheme of key villages, from where all economically useless bulls are to be isolated and castrated. Such cattle can advantageously be maintained, without much cost, on grazings in forests or other waste land, where they might even prove useful in fertilising the soil. Government propose to start 160 gosadans in the course of the next four years, and each unit of gosadan will be able to accommodate 2,000 cattle, the total cost spread over the entire period being about Rs. 2 crores. The expenditure will be shared equally by the Central and State Governments. Already, six such centres have started functioning in the States of U.P., Bihar and Madhya Bharat, and sanction for 15 more has been given.

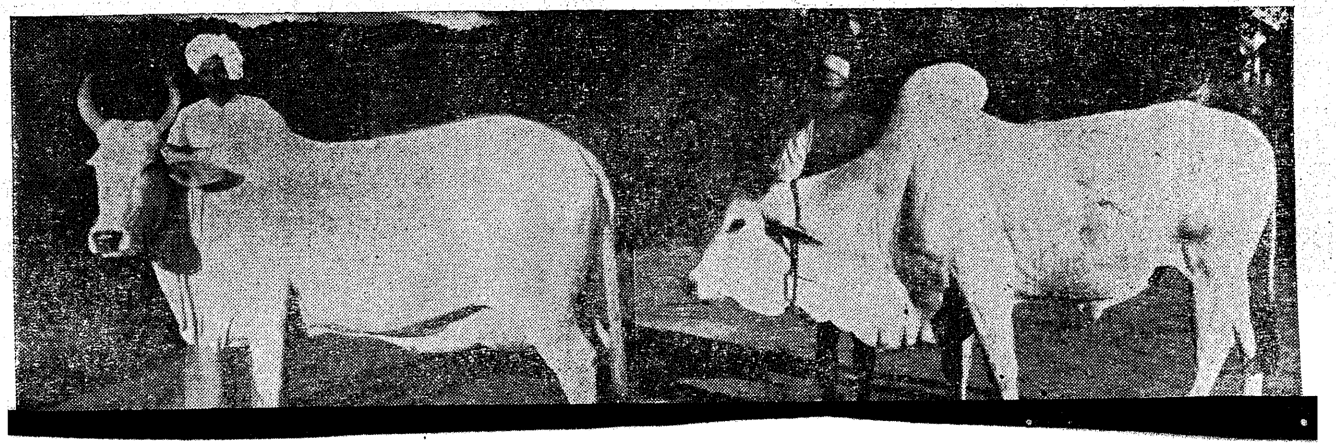
The Council also advises and assists the Gaushala Federations and the State Governments in (1) taking effective measures to prevent the slaughter of useful bovine cattle, (2) salvaging of dry cattle from towns, (3) segregating useless cattle, (4) organising short-term training courses for gaushala workers in animal husbandry and dairying, (5) upgrading productive cattle by scientific breeding, (6) preventing and eradicating infectious and contagious diseases among cattle and (7) providing technical assistance, veterinary aid, approved bulls for stud purposes and other facilities like grazing and land for fodder cultivation.

Village Livestock Improvement Scheme: Two more Firkas selected

The Government have directed that the Village Livestock Improvement Scheme be introduced in the Dendulur firka in West Godavari District and Malli firka in Ramanathapuram District in the current year. The scheme will be worked by the Department of Animal Husbandry.

The scheme will be started with six breeding bulls in the Dendulur firka and three breeding bulls in the Malli firka. No service fees will be charged. In order to induce the ryots not to sell their heifer calves and to maintain them well, a subsidy of Rs. 5 per mensem per calf will be paid for two years, commencing from the seventh month. The payment will be confined to 50 heifer calves per centre. The subsidy will be continued until the fourth generation.

PRIZE SPECIMENS: Rani, the Hartana breed champion cow, and a pedigreed bull belonging to the Delhi Pinjrapole. This pinjrapole is working on improved lines envisaged under the Government plan.



Training Young Veterinarians

In the heart of the City, on Vepery High Road, within audible distance of the Ripon Building clock chimes, and appropriately situated opposite to the office of the S.P.C.A. (Society for the Prevention of Cruelty to Animals) is India's oldest Veterinary College. It is young as institutions go, being but a year or so under fifty, but the College can start preening itself in advance on a prospective Golden Jubilee. Years alone count little in the development of an educational institution, but the Madras Veterinary College can look back with pride on a noble tradition of learning in Veterinary Science, with an all-India reputation of being a premier institution for training in Animal Husbandry.

The colloquial name of 'Dog Hospital' still finds currency around Vepery, but the old-style red brick infirmary (with modern yellow laboratories scattered round the extensive grounds) is still a landmark not merely for the fashionable aristocratic lady worried about her poodle's loss of appetite, but also for milkmen, jutka-drivers and the ilk—people to whom the sickness of a cow or the lameness of a pony means much more than the sentimental attachment to a pet; to them it is instant loss of income. Lecturers and students make valuable use of the steady stream of the dumb patients, quadrupeds and beasts of burden, and the studies cover all aspects of Veterinary Science—theory, practice and research.

The Madras Veterinary College was founded in the year 1903, and housed in a rented building known, oddly enough, as 'Dobbin Hall', on Vepery High Road. In 1905, permanent buildings were constructed in the vicinity for the use of the institution; additional buildings were put up from time to time, to meet the incessant requirements for more space. 'Dobbin Hall' was used as a hostel for the students right up till July 1931, when the new hostel buildings were completed and occupied.

Curricula of Studies

In the beginning, candidates who came for training in the institution were examined orally, and the successful students were given the diploma G.M.V.C. But, in course of time, written, oral and practical examinations were introduced.

The syllabus and curricula of studies were revised in the year 1930, and in 1936 the College was affiliated to the University of Madras. It thus became the first Veterinary College in India to get affiliated to a University, for conducting a graduate course leading to the degree of B.V.Sc. The duration of the course was then three years and one term. Consequent on the extension of the period of the Diploma course to four years, the duration of the B.V.Sc. course was extended to five years from 1938-39. With a view to having uniform curricula and studies, the duration of the degree course was reduced to four years and one term from 1946-47 onwards; the Diploma course which was till then conducted concurrently was abolished.

Candidates between the ages of 16 years and eight months and 22 years are generally admitted to the College. The basic educational qualifications required for admission to the course is a pass in the Intermediate Examination in Arts and Science of the Madras University or an Examination of any other University or body recognised as equivalent thereto, the students having offered either Chemistry or Natural Science as one of their optional subjects. The College offers post-graduate research facilities for qualifying for the M.Sc. and Ph.D. degrees of the Madras University, and these facilities are fully utilised both by the students and the staff.

Kumari N. Kalyani

Admission of Women Students

A memorable page in the annals of the Madras Veterinary College is the admission of women students to the B.V.Sc. degree course from 1948-49. This remarkable feature in the history of the College is a significant achievement in the cause of women's education throughout the country. And it is quite likely that in Kumari N. Kalyani the College has produced India's first lady veterinarian. Kumari Kalyani was one of the first lady candidates to be admitted to the B.V.Sc. degree course of the Madras Veterinary College in 1948-49. After a brilliant collegiate career, she qualified for the B.V.Sc. degree in June 1952, passing her final examinations with first rank and winning the coveted Panikkar Memorial Medal.

Free Grazing of Cattle

The Government have sanctioned the concessions of free cutting and removal of grass by cartloads or headloads and free grazing of cattle (except goats) in the reserve forests in all the villages of Nandyal and Sirvel Taluks in Kurnool West Division up to December 31, 1952.

·South Arcot Lignite

By Dr. C. V. S. RATNAM, PH.D., Member, Experts Committee, Lignite Investigation

Part V—Lignite Briquets and their Utilisation

The large deposits of lignite discovered recently in South Arcot District in the Madras State are the only significant coal deposits in South India to date. These lignite deposits extend over an area of 100 square miles and are estimated to contain about 2,000 million tons of lignite. Lignite, a member of the coal family, is characterised by relatively large amounts of moisture, inability to give coke when treated in the conventional coke ovens and a tendency to disintegrate into small pieces on exposure to the atmosphere. The South Arcot lignite contains 35 to 45 per cent moisture and compares well with lignite obtained elsewhere in the world.

Lignite, as obtained from the mine, can be used straight away in a boiler furnace at the mine site or at a limited economical distance away from the mine. But for markets at a considerable distance from the mine, for domestic purposes and for plants now utilising higher grade coals, natural lignite may not be suitable. The high percentage of moisture and the tendency to disintegrate easily during handling makes natural lignite unsuitable for these purposes. Lignite briquets can be used for locomotives, existing industrial furnaces, thermal stations and domestic purposes.

Briquetting is essentially compacting of finely divided materials into more useful and saleable product. Briquetting lignite makes the material more useful than the natural lignite for certain purposes. Briquetting improves the handling properties of lignite, increases the economic distance over which it can be used and serves the domestic market.

Process of Briquetting

The process of briquetting is briefly described below. Natural lignite is crushed and dried in a suitable way. The dried lignite is then mixed with a suitable binder and fluxed with steam. A briquetting machine processes the the mixture of lignite and binder into suitable briquets which are cooled and despatched to the markets.

These are different ways of accomplishing every one of the above operations involved in briquetting lignite and the circumstances of each case decide them.

For example, the usual method of drying coal in a briquetting plant is by a rotary drier, a very large piece of machine and not very economic. Recently flash drying and fluidized drying techinques have been developed to do this same thing easily and economically.

Most coals and lignites need a binder to aid briquetting. The usual binders are petroleum asphalts and coal tar pitch. Waste sulphite liquor molasses and starch have also been used as binders. But the German brown coal was found to briquet without binder and binderless briquetting is extensively practised in Germany, amounting to about 30 million tons in 1949. Australia does the same. About three million tons of binderless lignite briquests are produced there annually.

Investigation on South Arcot lignite indicates that it can be briquetted without binder. This factor is of great importance because asphalt and pitch binders are very expensive in India. To meet the existing and potential demands for lignite briquets in South India, it may be necessary to produce two kinds of briquets. For use in locomotives and industrial furnaces, dried South Arcot lignite may be briquetted with or without a binder. This briquet need not be processed further so as to make it smokeless, because smoke does not seriously affect their use for these purposes. The briquets will have the required handling qualities and crushing strength, and have the necessary calorific value. Although the calorific value of South Arcot raw lignite is about 7,000 B.T.U. per pound, these briquets will have a calorific value of about 10,000 to 11,000 B.T.U. per pound.

For Domestic Use

For household purposes and for hotels and other similar purposes, the above briquets are not suitable, as they give a lot of smoke. The briquets for this purpose must resemble as much as possible charcoal now used in large quantities. For this purpose, the briquets must be carbonized around 600°C yielding carbonized briquets which can be used as smokeless fuel of good heating value and tar, which can be processed to yield liquid fuels, phenols, acids and the like. These briquets will have a calorific value of about 12,000 B.T.U. per pound and will be an ideal fuel for the purposes mentioned and whereever good solid fuel is necessary. A good, smokeless briquet at a reasonable price comparable to the present charcoal price of about Rs. 150 to Rs. 180 per ton will be in great demand in our State. Such briquets are sold as premium fuel in the U.S.A. This will reduce the cutting down of trees and forests for firewood and charcoal for domestic purposes and for bus and lorry transportation. The tar will prove a good source of material, very much required at present.

The Expert Committee on Lignite Investigation appointed by the Madras Government considered this problem of briquetting South Arcot lignite and they feel that this should be developed simultaneously with the proposed pilot plant mining operation. Experiments are under way at the mine site and other places to arrive at the best conditions for briquetting South Arcot lignite. When this industry is established in Madras State, as it is now established in Germany and Australia, there will not be any fuel shortage for industries, buses, domestic purposes and locomotives.

Recognition of M.I.T. Diplomas

The Government of India, in consultation with the Union Public Service Commission, has decided to recognise diplomas awarded by the Madras Institute of Technology, Madras, in aeronautical engineering, automobile engineering, electronics and instrumental technology as equivalent to engineering degrees of recognised universities for the purposes of recruitment to posts under the Central Government.

U.K. Standard Tests for Farm. Machinery

By HILARY PHILLIPS

In Britain there is one tractor for every 57 acres of arable land, and in a country where more than one-third of all the farms are less than 50 acres in size, this shows a pretty high degree of mechanisation. The agricultural engineering industry employs about 45,000 people, and the value of its goods adds up to more than £100,000,000 a year. The United Kingdom is second only to the United States in the number of tractors exported, and the influence of British agricultural machinery on overseas farming is considerable.

All this has developed fairly recently. To give an example: in 1937 there were 50 combine-harvesters in Britain, and in the harvest just completed around 20,000 were used. It is hardly surprising, therefore, that the National Institute of Agricultural Engineering should have grown rapidly.

The Institute started in a modest way in 1924, as a research department of the University of Oxford. Since then it has progressed until after a spell under the Ministry of Agriculture it came, in 1949, under the control of the Agricultural Research Council.

Staff of 300

Now it is firmly established at Silsoe, with a staff of more than 300 in eight departments. Wrest Park is a beautiful 19th century house in the country, about half-way between Luton and Bedford. The estate used to belong to the de Gray family, which owned it continuously from the 15th century until 30 years ago. The present house, the third, was built in 1837, but the formal gardens surrounding it were laid out much earlier.

The testing of agricultural machinery and of tractors has always been one of the main jobs of the Institute. Even such unorthodox things as a hand-hoe from Argentina, a potato-clamper, and a mechanically operated spade have been tested. A satisfactory National Institute of Agricultural Engineering "ticket" is accepted by the British farmer as the hallmark of an efficient machine.

The big increase in the number of combine-harvesters in use in Britain has kept workers at Silsoe busy devising ways of drying and storing grain and other crops. The comparatively high moisture content of grain harvested by combine in Britain can make the immediate post-harvest storage and drying position very acute in a wet season.

Farmers are being urged to equip themselves with their own drying plants, and one of the most successful for the small man was designed at Silsoe four years ago. It is called a platform drier. Grain is laid out in bags on a concrete or brick platform, and warmed air is blown up through holes immediately under each bag. For bulk storage a ventilated silo has been designed.

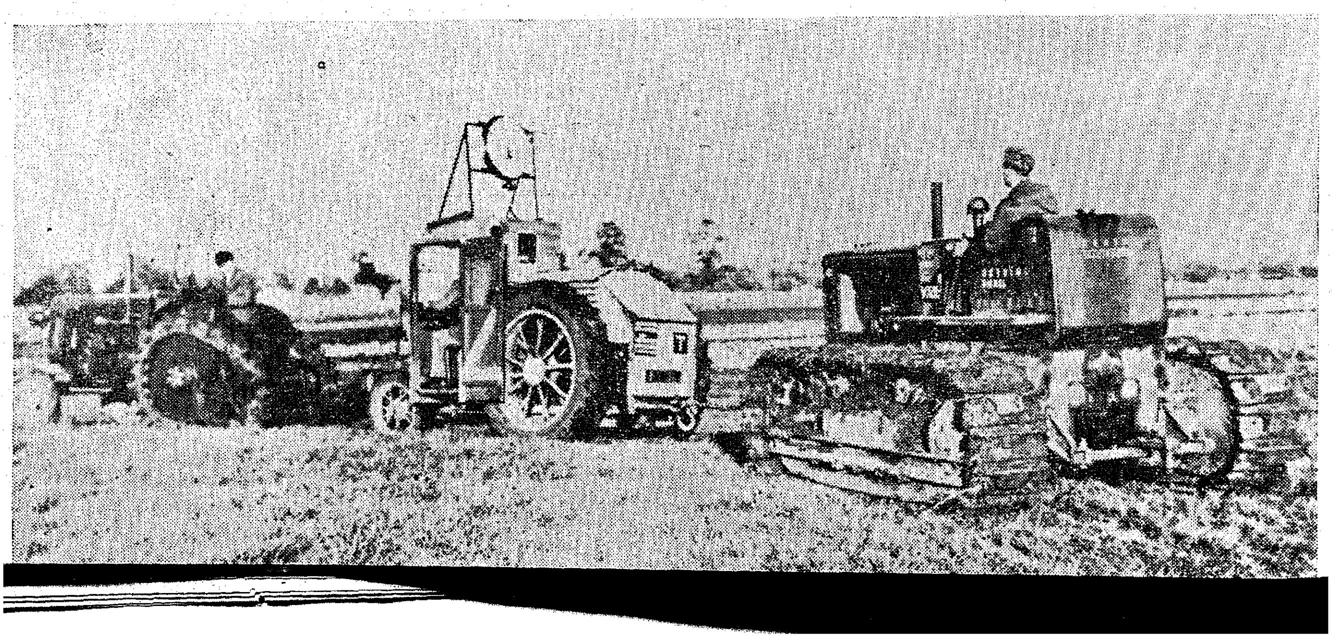
Interesting Projects

One of the most interesting projects under way at Silsoe is a complete groundnut harvester. If this machine is successful, it will go into a standing crop of nuts, lift the plants, remove the soil from them, strip off the nuts and put them into bags. The first prototype machine will be tested this year in East Africa.

Another scheme which promises well is the tractor with hydraulic transmission. This tractor will be able to move at exactly the speed the operator desires—an immensely important feature in many agricultural operations. It will have no gearbox, nor ordinary transmission; in fact, there will be next to nothing between the front and rear axles except a seat for the driver. The prime mover will be between the front wheels, and the drive for the rear wheels will be encased within them. The operator will have perfect view of the ground to his front and immediately beneath him, and there will be plenty of room for the attachment of implements midway, if necessary.

There is a big Horticultural Engineering Department at Silsoe, as well as departments for instrumentation and field investigation, and a large information unit. (*B.I.S.*).

FIELD TRIAL: A field test being carried out at the National Institute of Agricultural Engineering at Wrest Park, Silsoe, Bedfordshire, to determine by means of an electrical loading car the power developed by a tractor on various types of soil. The car is coupled to the tractor by a draw bar dynamometer which shows on a dial the pull exerted by the tractor.



8 1952

U.N. EXPERT MEETS LAW MINISTER: Dr. Edward Galway, U.N. Expert, recently met Sri K. P. Kutti-krishnan Nair, Minister for Law, at Fort St. George. Dr. Galway is a member of the section of Social Defence of the U.N. dealing with the subject of control, treatment and prevention of juvenile delinquency. A specialised counsellor in the field of improvement of prisons, borstals aud certified schools, Dr. Galway is touring India to offer his help and advice in regard to orientation programmes, correct coral administration and pre-discharge work in Indian jails.

Crime and Jails

Dr. Galway's Discussions with Law Minister

Dr. Galway, Member of the Section of Social Defence, United Nations, held discussions with Sri K. P. Kutti-krishnan Nair, Minister for Law, on problems relating to jails and jail administration, on Wednesday, November 5, 1952. The need for speeding up of trials, legal aid by the Prisoners' Aid Society to under-trials, classification of prisoners, sufficient information to the sub-jail authorities, so as to make possible segregation on the basis of age and previous jail experience, the working of the Borstal Act, over-crowding in jails, long trials, jail reforms, including setting-up of different types of jails for different types of prisoners, the introduction of wage earning by labour of prisoners, preliminary screening of cases to decide which set of offenders could be released on undertaking and which set detained as under-trials, and specialisation in youth cases, were among the subjects discussed.

Mr. Justice P. Rajagopalan, Chairman of the Committee on Separation of the Executive from the Judiciary, Sri W. R. S. Sathianathan, Member, Board of Revenue, and Member of the Committee on Separation, the Joint Secretary, Home Department, the Inspector-General of Prisons, the Chief Presidency Magistrate, the Chief Inspector of Certified Schools and other departmental officials concerned were also present and participated in the discussions.

Government Officials Punished for Corrupt Practices

During the month of July 1952, one Assistant Engineer of the Highways Department, one upper division clerk of the Public Works Department, one Inspector, one Sub-Inspector and one head constable of the Police Department, one Monegar, Amindivi Islands, and one peon of the Registration Department were compulsorily retired; one lower division clerk of the Revenue Department, one peon of the Registration Department and one Prohibition Guard were discharged from service; one Tahsildar, one Deputy Tahsildar, one Minor Irrigation Overseer, one Fieldman of the Agriculture Department, and one Police head constable and six constables were dismissed; and one attender of the Transport Department was removed from service. The punishments awarded to four others were less severe.

Illicit Emigration to Ceylon

There have been raids conducted by the Police Department to prevent illicit emigration to Ceylon by country craft at Ramanathapuram Railway Station and the area between Pamban and Dhanushkodi. Eight emigrants and one tout have been apprehended in both these places.

Six persons, attempting to go to Ceylon in country craft, were apprehended at Somanathapuram seashore by the Inspector of Customs Preventive Party, Manamelkudi, on August 24, 1952, and handed over to the police.

A tout by name Devasaghayam Nadar of Madathivilai, Arumughaneri, who was apprehended during the campaign in March 1952, has been convicted and sentenced to rigorous imprisonment for one month. Six other emigrants, who were apprehended along with him, have been sentenced to pay a fine of Rs. 20 each.

A man (suspected to be organising illicit emigration to Ceylon by using his boat), who applied for a visa and Embarkation Certificate to go to Ceylon, was detained by the Protector of Emigrants, Mandapam Camp, and handed over to the police for necessary action.

There has been a series of raids, conducted by the Emigration Department, Government of India, in Tirunelveli and Ramanathapuram areas, to prevent illicit emigration to Ceylon by country craft. The places covered by the raids include Tharuvaikulam, Nazareth, Tiruchendur, Tirupalakudi and Rameswaram. A total number of 13 emigrants and 12 touts were apprehended; two boats were also seized.

Working of the Police Department

Administration Report for the year 1951 on the working of the Police Department is reviewed below :

The year 1951 registered a slight increase in the volume of crime due to persistent adverse economic conditions, partial unemployment of rural population and diversion of police man-power to a considerable extent to combat the violent activities of anti-social elements during the first half of the year to the detriment of normal police work. The total number of cognizable offences excluding offences under the Special and Local Laws and the 'nuisance' sections of the Indian Penal Code, increased from 82,348 in 1950 to 89,466 in 1951, an increase of 7,118 or 8·6 per cent. Grave crimes increased from 61,871 in 1950 to 66,740 in 1951, an increase of 4,869 or 7·9 per cent, there being an increase under all heads except dacoity and robbery. Murder increased in number from 1,261 to 1,428; house-breaking from 14,666 to 15,747, cattle theft from 6,570 to 7,537 and ordinary thefts from 38,276 to 40,979. Dacoity decreased from 389 to 368 and robbery from 709 to 681. There was also an increase in the total number of cases under Special and Local Laws from 262,172 in 1950 to 270,885 in 1951. The increase under certain heads was due to the enforcement of various control orders and the Prohibition Act throughout the State. The number of nuisance offences decreased from 282,817 in 1950 to 247,020 in 1951. The number of serious offences against person and property showed an increase by 2,634 or 9·3 per cent.

The percentage of detection of total cognizable crimes was 42 per cent as against 43·7 per cent in 1950 and 44 per cent in 1949. The fall in detection by 1·7 per cent as compared with the previous year was mainly due to the manning of a large number of police stations by Sub-Inspectors promoted from the ranks, generally lacking in intensive experience and of comparatively poor calibre, the deputation of a large body of experienced officers to the Hyderabad State and the Government of India, and the diversion of the police to work connected with the countering of the activities of the terrorists from their ordinary functions relating to prevention and detection of crime.

The Crime Branch of the Criminal Investigation Department worked efficiently and investigated a number of important cases of murder, cheating, fraud, misappropriation, counterfeit currency notes, conspiracies of anti-social elements, use of bombs and explosives, bogus telegrams, kidnapping of children, issue of forged Secondary School-Leaving Certificates, etc. The Criminal Investigation Department worked in close liaison with District Intelligence Bureaux as usual, co-ordinating their work and functioning as the Central agency for dealing with organised crime. Better results were achieved during the year in the use of scientific aids to investigation. There was an increase in the number of calls made on the services of experts, especially in coin and currency. The X Branch achieved a fair measure of success in the investigation of corruption cases during the year. The Anti-Blackmarketing staff in the districts continued to function with vigour and a certain number of blackmarketeers were detained and a large number deterrently punished.

Labour unrest resulting in strikes and lockouts, and agrarian trouble in the districts of East and West Godavari, Nellore, Malabar, Ramanathapuram and Madurai threw considerable strain on the police. Nevertheless they rendered the necessary assistance.

Communal tension between Hindus and Muslims was noticed in Guntur, Bellary, Cuddapah, North Arcot, South Arcot, Madurai Rural, Tiruchirappalli and Salem Districts. Fourteen incidents were reported and in all two persons were killed while 119 were injured. Armed Police detachments were stationed wherever required and the incidents were brought under control. The number of cases of rioting or unlawful assembly including activities due to anti-social elements showed a slight increase from 1,715 to 1,745, but law and order on the whole were well maintained. It is significant that the police had to open fire on only 38 occasions to maintain law and order as against 97 occasions in 1950.

The number of traffic accidents recorded in Madras City during 1951 was 2,953 as against 2,718 in 1950. Sixty-seven cases were fatal in 1951 as against 42 in 1950. The slight increase over that of the previous year was due to increase in the number of vehicles as also the total population.

The Armed Reserves were kept up to strength and in cases of labour unrest, agrarian troubles, anti-social activities by subversive elements both in the State and on Hyderabad border, and during pre-election bandobust, they discharged their duties efficiently. Tear smoke squads were functioning in Madras City and in the Armed Reserves of all the districts. The Malabar Special Police and Special

Armed Police were stretched to the full and with good results in countering the activities of the subversive elements in several districts.

The Madras Prohibition Act was enforced by the police in the districts of Guntur, Nellore, Chittoor, North Arcot, Tanjore, Madurai Urban, Madurai Rural, Tiruchirappalli, Salem and Coimbatore as part of their normal duties, and latterly they are taking increasing interest in enforcement.

In the Police Radio Network, 30 static stations and 29 Transportable stations were functioning. Separate Radio Networks were functioning in the Malabar Special Police, Special Armed Police, in the Madras City and in Madurai, Coimbatore and Tiruchirappalli towns. The Radio Network rendered signal service in combating the violent activities of the anti-social elements, particularly in Kurnool District. For the maintenance of law and order in connection with the First General Elections, the entire Radio Network was mobilised to work on a "round the clock basis" and it functioned as well as was desired.

Extensive police bundobust arrangements were made during the closing months of the year in connection with the First General Elections under the new Constitution, which came off in January 1952. Few major events were reported and the conduct of the police came for all round praise.

A "Courtesy Week" was observed during the year in order to establish that the police are in every sense friends of the public and to improve further the good relations between them. The police co-operated well with the Revenue authorities in procurement work and in the prevention of smuggling.

Like the previous year, the year 1951 was a very difficult one for the police throughout the State on account of anti-social activities by subversive elements, labour and agrarian unrest and severe adverse economic conditions. The efficiency and morale of the police force however remained unimpaired. The force rendered meritorious service during 1951 in combating the subversive activities of lawless and anti-social elements, creating a general feeling of security throughout the State.

The adjustment of the activities of the force to a radically democratic set-up is in places no doubt attended with some difficulty, but is successfully being done without sacrificing in any way the efficiency for which the force in this State acquired a reputation under the old conditions more favourable for mere efficiency.

Applications for India-Pakistan Passports

In the Press Note No. 124, dated 7th September 1952, regarding application forms for India-Pakistan passports, it was stated that after completing the form and getting the Subsidiary Declaration in the form signed by the persons authorised, applicants may send the forms with three copies of photos, etc., direct to the Deputy Secretary to Government, Home Department, by post or present the applications at the counter in the Secretariat to be opened for the purpose. In modification of the instructions in the above Press Note, dated 7th September 1952, it is ordered that applications for India-Pakistan passports should be presented to and sent through the Collectors of the districts in which the applicants reside or the Commissioner of Police, Madras, in the case of applicants residing in the City.

Persons applying for passports for travel between India and Pakistan should therefore address their applications to the Collectors of districts or the Commissioner of Police, Madras, as the case may be, to be forwarded to the Deputy Secretary to Government, Home Department, Madras-9. Applications and photographs should be duly attested by any one of the following persons :—

(i) Any member of Parliament or State Legislatures; (ii) Any Gazetted Officer; (iii) Any officer of the Land Revenue Department not below the rank of Patwari; (iv) Members of Corporations, Municipalities, District or Union Boards or any other similar local bodies recognised by the State Government for the purpose; (v) Any person of the teaching staff of any University, college or any school recognised by the Educational Department of the State; (vi) Practising lawyers, mukhtiars or doctors; (vii) Any Justice of the Peace or Honorary Magistrate.

Any further particulars regarding procedure may be obtained from the Commissioner of Police in the City or the Collector or the nearest Deputy Tahsildar in the districts.

Educational Concessions for Children of Rural Medical Practitioners

The Government have directed that the educational concessions granted to the children of the Non-Gazetted employees of the State Government in the Order dated May 31, 1952, be extended to the children of the Rural Medical Practitioners and Maternity Assistants, employed in recognised Rural Dispensaries (subsidised or non-subsidised) serving under local bodies or Government.

Zamindari Abolition : Interim payments

On behalf of the Government, the Director of Settlements, Madras, has deposited interim payments for fasli 1360 with the three Tribunals in respect of the zamin and under-tenure estates taken over in the third and subsequent batches. The names of the estates, the amounts due for each estate, the amount recovered towards the rents collected by the landholders from the ryots up to the notified date and the amount deposited with the Tribunals are published at pages 617–632 in Part II of the *Fort St. George Gazette*, dated May 14, 1952.

Training for Co-operation

By Sri J. M. LOBO PRABHU, I.C.S., Secretary, Development Department

Among the most high powered factories in the world are schools, because they develop the human mind which has not been equalled for its force and range. The temper, the achievements of any civilisation, of any age is dependent on and is reflected by its schools. The teachers and students of schools therefore have a significance, which they and others should understand. They supply impulse to vast aggregates of population, to great changes in life. The Central Co-operative Training School has importance not only because it is a school, but also because it stands for a new approach in human relations.

Strictly, the approach is not new. Co-operation is the beginning of civilisation but it has been forgotten in the complications imposed by the growth of population, based on science and money. Among the last strongholds of co-operation were our own village communities, with inter-related obligations and duties. Their self-sufficiency has been destroyed not merely by trains and trucks but economics and politics which have made them intimate and integrated parts of a great country.

Basic Unity of the Village

We need not regret the absorption of the village in the fabric of a great country, but we must regret the disintegration of the unity and mutuality of relationships which existed in our villages. It is the task of co-operation to warm the members of these relationships so that even though the village is a part of the country, within itself it retains unity of incentives and interests.

Such being the task of Co-operation, what precisely should a Central Training Institute teach ? The Institute has been in existence since 1937. It has trained senior and junior Inspectors. It has supplied a good proportion of the rural welfare workers. It has a reputation in India of being a model institution for Co-operative training. The question is whether anything can be done to increase its effectiveness and reputation. The curriculum provides for Co-operative Law, Banking, Agricultural Economics, Audit and Book-keeping. All the teaching necessary to make Co-operation a commercial success appears to be present. Is this enough ? Should not Co-operation do something more, something for the human relationship which was once the basis of our community life ? Perhaps what is missing is a study of human factors, of the psychology of the masses to be served by Co-operation.

Servant of he Community

It will be a mistake to underrate the importance of this psychology. Perhaps in no other country in the world has the human mind been subject to the same stresses and strains. Centuries of foreign rule and local despotisms have driven the people to live inwardly in distrust and fear of all outside influences. The official, particularly, has typified to the villages, the arbitrariness, violence and injustice of life.

It is in this prevailing psychology the Co-operative official has a special role, of proving to be a servant of the community's interests. He should not represent any power except that of service. The question is, is this is taught in this Institute and is practised by those trained in their work. If the Co-operative official becomes identified with other officials as a collector of money and enforcer of rules, he is failing not only the Co-operative movement, but the general administration which is expecting him to make all officials acceptable to the masses, by his example. It seems necessary therefore to inculcate in this school an understanding of the people and willingness to serve them. Both the training and the spirit of the missionary are necessary if the masses are to be led by Co-operation to discover and develop themselves.

From the Presidential Address of Sri J. M. Lobo Prabhu, I.C.S., Secretary to Government, Development Department, at the Inauguration of the Trainees' Association of the Central Co-operative Institute.

The Kumbla Grama Sangham

The Kumbla Grama Sangham in the Kumbla Select Firka in the Kasargod Taluk of South Kanara District was organised under the Prohibition Amelioration Scheme in the year 1948. The objects of the Sangham are to promote the economic, moral and social welfare of the people of the area and to organise all such works as would help the Government to fulfil the task in direct rural reconstruction.

In order to implement the objects, the Sangham felt the need of having a building of its own to serve as a community hall. Accordingly, the office-bearers collected local donations to the tune of Rs. 1,505 to begin with and applied to Government for subsidy of Rs. 1,500. The Government sanctioned the subsidy. A plot of Government land in the heart of the town was alienated by the Collector in favour of the Sangham. The Sangham was got registered under the Societies Registration Act, 1860, and the subsidy sanctioned by the Government was drawn and disbursed to it.

Local donations and the Government subsidy were found to be inadequate to complete the building, the construction of which was in progress, in accordance with the plan approved by the Government for community halls. The work of the building was expected to be completed by 31st March 1951. The building was half done and the work came to a standstill as the entire amount available on hand was spent. The Collector then came to the rescue, as a result of which local collections to the tune of Rs. 1,800 including proceeds of a benefit cinema show and cost of roofing and ceiling tiles, were effected.

The building was almost completed at a cost of Rs. 6,607 and was declared open by Sri A. R. Rajarathnam, I.A.S., Collector of South Kanara, on 31st July 1952. But a further amount of Rs. 1,500 will be absolutely necessary for the completion of the Community Hall. The Government have therefore been approached for a further grant of Rs. 1,500 for the completion of the building.

Multipurpose Societies

Sandur

The Vijaya Agricultural Bank of Sandur State (Bellary District) was converted into a full-fledged multipurpose co-operative society during the year. It is a special type of society, the only one of its kind in the district. It was registered on 3rd April 1907 under the Sandur State Co-operative Regulation as a Bank. Consequent on the merger of the State, the society was registered as a full-fledged multipurpose society with a limited liability under the Madras Co-operative Societies Act VI of 1932 on 18th February 1952. This is the forty-fifth year of its working. It has now 684 members on rolls of whom 13 are institutions and the rest are individuals with a paid-up share capital of Rs. 13,700. The society is placed under 'A' class.

The society has not borrowed any funds from the financing bank till now. It has utilised the uninvested Reserve Fund of Rs. 27,334–13–0 in its business, besides a sum of Rs. 11,266 Fixed Deposits tapped locally. It has a working capital of Rs. 52,313. It has not issued surety loans to members but has issued loans on the pledge of jewels and on mortgage of immovable properties. A sum of Rs. 38,612–9–0 is outstanding against its members out of which Rs. 500 represent jewel loans, while the rest are mortgage loans. On the non-credit side it deals in foodgrains, chemical fertilisers and agricultural implements. Its purchase and sales in this regard were Rs. 1,31,509–1–0 and Rs. 1,41,588–8–0 respectively during the year. The working of the society resulted in a gross profit of Rs. 5,127–3–0 and a net profit of Rs. 1,591 during this year.

The society is catering to the needs of a large portion of the entire population of this small State and has in its by-laws provision to meet all the members' needs. It proposes to construct a godown out of its funds and Government subsidy if permitted to do so. The working of the society is good, and it has a bright future.

Eletipalem

The Eletipalem Multipurpose Co-operative Rural Credit Society was registered on 4th February 1925 and started on its work on 17th March 1925 with 15 members and with a paid-up share capital of Rs. 25. The area of operations of the society is confined to Eletipalem, Velamvaripalem, etc. Loans are also granted on the security of immovable properties situated in Nagaram.

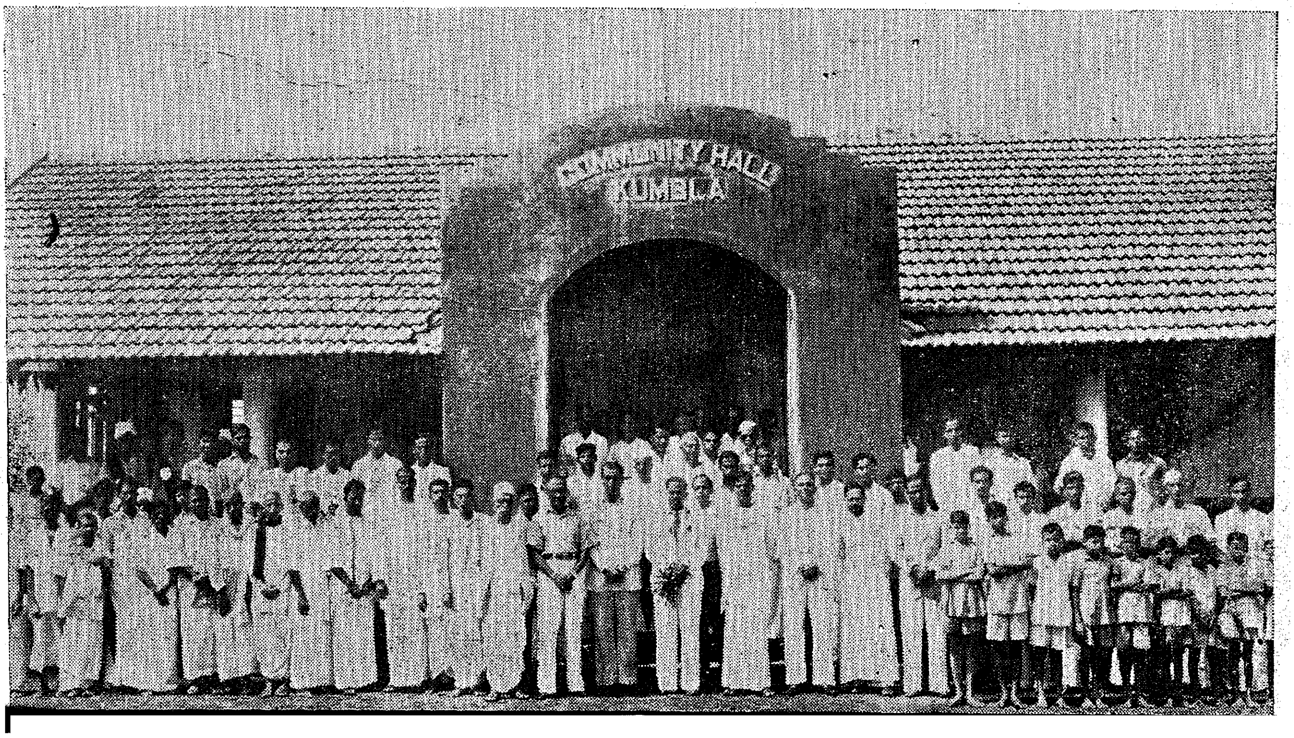
At present there are 165 members on rolls with a paid-up share capital of Rs. 2,546–8–0. The maximum borrowing power and individual maximum borrowing power of the society are Rs. 60,000 and Rs. 1,000 respectively. There are loans outstanding against members to the extent of Rs. 12,993. It has taken up multipurpose activities for the benefit of its members and non-members during the year 1951–52. The society has taken up distribution of foodgrains, iron and paddy seeds. The society encouraged its members to dig manure pits, and nearly ten tons of compost was prepared during the year. Provision is also made in the subsidiary by-laws to lend to its members for the purchase of pumpsets.

The President with the assistance of four other Panchayatdars is taking keen interest in the affairs of the society. The non-credit transactions done in this year are noted below:—

	RS.	A.	P.
Purchase of manures	6,302	1	0
Sale of manures	6,722	9	0

The society is working on profit.

KUMBLA COMMUNITY HALL: The Kumbla Grama Sangham in the Kumbla Select Firka in Kasargod Taluk of South Kanara District, built this fine Community Hall, with local donations and Government subsidy, at a cost of Rs. 6,607. The Sangham is the centre of many cultural and sporting activities.



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Control Orders in Force on 15th November 1952

FOOD AND AGRICULTURE DEPARTMENT

MOVEMENT OF PADDY AND RICE WITHIN THE STATE

G.O. Ms. No. 1068, *Food and Agriculture, dated* 1st *July* 1952.

In view of the revised Food policy a new Control Order has been issued regarding the movement of paddy and rice within the State. According to Order I of Notification I, the State is divided into six zones and the movement of paddy or rice or their products from one zone to another zone by mechanical means is prohibited except under a permit issued by the Collector of the districts concerned. Free movement of paddy or rice or their products within the zone is allowed. According to Order II of Notification I belt area restrictions already existing in the districts of South Arcot, Tanjore, Ramanathapuram and Anantapur on the movement of paddy or rice or their products are continued.

According to Notification II only landholders will be allowed to transport paddy or rice from the produce of their lands from one zone to another zone for their personal consumption. This new Zonal Control Order cancels the notifications issued in G.O. Ms. No. 550, Food, dated 18th June 1948 and G.O. Ms. No. 478, Food, dated 27th May 1948.

The Zonal Control Order issued in G.O. Ms. No. 1068, Food and Agriculture, dated 1st July 1952 has been amended due to the inclusion of Hosdrug Sub-taluk of South Kanara District in the sixth zone comprising Malabar and the Nilgiris (G.O. Ms. No. 1216, Food and Agriculture, dated 26th July 1952).

By G.O. Ms. No. 1346, Food and Agriculture, dated 20th August 1952, the Zonal Control Order has been amended to prohibit the movement of paddy, rice and their product, even by non-mechanical means of conveyances from one zone to another zone within the State except headload by peasantry up to one maund for personal or family use.

Orders I and II in Notification I of the Zonal Control Order for paddy and rice issued in G.O. Ms. No. 1068, Food and Agriculture, dated 1st July 1952 have been amended allowing the bona fide travellers to take with them two Madras measures of rice or four Madras measures of paddy as part of their personal luggage (G.O. Ms. No. 1712, Food and Agriculture, dated 5th November 1952).

Order II in Notification I of the Zonal Control Order for paddy and rice issued in G.O. Ms. No. 1068, Food and Agriculture, dated 1st July 1952 has been amended empowering the Police Officers not below the rank of Head Constable and Revenue Officer not below the rank of Revenue Inspector to seize the articles in respect of which they have reason to believe that a contravention of the Order has been committed and also making a provision that the searching Officers, while exercising the power of entry should pay due regard to the social and religious customs of the occupants of the premises (G.O. Ms. No. 1737, Food and Agriculture, dated 8th November 1952).

PLYING OF MOTOR VEHICLES AT NIGHT

G.O. Ms. No. 1306, Food and Agriculture, dated 9th August 1952 : In supersession of the Order issued in G.O. Ms. No. 393, Food, dated 3rd April 1947, the Government have issued an Order prohibiting the plying of motor vehicles carrying paddy, rice, millets and their products, excluding products of foodgrains which are used as cattle foods, namely, rice bran, wheat bran, bran of husks and millets and maize between the hours of 7 p.m. and 6 a.m. on any road or land situated in a district, which is notified by the Collector in the District Gazette.

ORDER PROVIDING POWERS TO REQUISITION STOCKS OF FOODGRAINS.

This Order extends to the whole of the State of Madras. This empowers the Government to issue directions to the Collector or any other officer to requisition stock of foodgrains whenever the Government consider it necessary to do so. This also empowers Collectors to call for declaration of stocks of foodgrains from any person.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

THE COTTON CROP (COMPULSORY GROWTH WITH CHILLIES) ORDER, 1950.

This Order extends to the whole of the State of Madras. At present the Order has been made effective only in the districts of Guntur, Krishna, East Godavari and West Godavari and according to this no person can cultivate the rainfed crop of chillies in these districts except as a crop mixed with cotton in the proportion of not less than one line of cotton plant to every 14 lines of chilli plants.

THE MADRAS MANURE DEALERS' LICENSING ORDER, 1949.

The Madras Manure Dealers' Licensing Order, 1949, has been re-issued as the Madras Manure Dealers' Licensing Order, 1949.

An amendment issued on November 25, 1950, lists the names under which manure materials are sold and the definitions implied in the sale of manure articles against those particular names, and notifies that the sale of an article under any of the defined names shall constitute a warrant that it accords with the implied definition. Further, the particulars of the implied definition should be marked on the manure bags, in addition to the name under which the manure is sold, the gross weight and the name of the manufactures.

An amendment issued on December 29, 1950, gives the enhanced rates per annum of licence fees for the different classes of licences. The question of revising these rates is under the consideration of the Government.

Another amendment, dated December 29, 1950, explains that: (1) in cases where a mixing or miller's licence has been obtained, no other licence under the Order is necessary; (2) mixing or miller's licence will have to be taken by the licensee in respect of each centre where mixing or crushing is carried on; and (3) in the case of manure mixtures, a non-recurring fee of Rs. 50 for each mixture shall be payable. If the analysis of any mixture is changed, it will be regarded as a new mixture for the purpose of this Order and a fresh registration fee shall be payable.

An amendment issued on 24th January 1951 states:

"Every licence shall ordinarily be renewed before the expiry of its term; but applications for renewal will be received up to 30th June of the financial year for which the renewal is applied for, on payment of the prescribed fee and in addition, a penalty of rupees two for each such application."

According to an amendment issued on January, 5, 1952, the approved form of licence issued under this Order will provide in future suitable columns for incorporating the following details at the time of the renewal of licences:—

1 Year for which licence is renewed;
2 Date of renewal;
3 Fee;
4 Chalan number and name of treasury;
5 Penalty, if any;
6 Chalan number, date and name of treasury;
7 Signature of licensing authority; and
8 Remarks.

The three classes of licences issued under this Order will in future, be issued in three distinct colours as shown:

Class of licence.	*Colour.*
1. Oil Mills	Green.
2. Dealers in manure	Red.
3. Firms engaged in manure mixing trade ..	White.

G.O. Ms. 1013, Food and Agriculture, dated, June 23rd 1952: Certain amendments issued specify the principles and conditions on which the licensing authority can either refuse to grant a licence under the above Order or cancel one which has already been issued.

By an amendment issued in G.O. Ms. No. 1361, dated 22nd August 1952, for explanation on (1) under clause 4, the following is substituted: "In cases where a mixing or millers' licence has been obtained no dealers' licence is necessary for the particular place of business."

THE MADRAS MANURE MIXTURE QUALITY AND PRICE CONTROL ORDER, 1950.

According to this Order only firms of standing dealing in manure and approved by the Government of Madras on the recommendations of the Fertiliser Advisory Committee through the Director of Agriculture shall manufacture and market manure mixtures. The firms dealing in manure shall legibly mark on the manure bags the following particulars:—

(*a*) The registered brand and name of the manure mixture;

(*b*) The organic and inorganic, total P.O., W.S. P O, K O contents of the manure mixture denoted by the letters N, P (T), P (S) and K, respectively.

(*c*) The registered name of the firm.

(*d*) The crop or crops for which the manure mixture is suitable; and in the case of a general mixture for all crops the expression "All Crops".

(*e*) The gross contents by weight in pounds.

The manure mixture will have to be sold at the prices approved by the Joint Director of Agriculture. The fertiliser mixture shall be put up in the market in sealed bags, to obviate the contents being tampered with without breaking the seal. The firms dealing in manure shall not alter the ingredients, or the guaranteed analysis, or the price of the manure mixture, except with the previous approval of the Joint Director of Agriculture.

MADRAS FOODGRAINS CONTROL ORDER, 1947.

This Order exercises control on the purchase, sale and storage beyond certain limit (i.e., 10 maunds in the case of purchase, sale and storage for sale and 15 maunds in the case of storage for purposes other than those of sale) of the following foodgrains and the products thereof by a system of licensing:—

Wheat, paddy (rice in the husk) including fried paddy and parched paddy, rice (husked) including beaten rice, puffed rice and parched rice, cholam (Jowar), cumbu (Bajra), ragi, korra, maize (zea mays) and rye. For the grant of a licence under this Order for dealing in foodgrains, one must have been in the foodgrains trade at any time prior to 22nd June 1942, the date on which this Order first came into force.

A licence fee of Rs. 24 per annum is chargeable for each licence or exemption certificate issued or to be issued under the Order.

The Commissioner of Civil Supplies or an officer authorised by him in this behalf may in special cases condone any delay in the payment of the said fee up to any period specified by him on payment of a penalty of Rs. 2 in each such case.

Every applicant should produce satisfactory evidence to prove that he was in the foodgrains trade during the period prescribed. He should not also have been found guilty at any time of hoarding or black-marketing offences under the Control Orders or even strongly suspected of having indulged in such anti-social activities. Harijans, Co-operative societies, hand-pounding concerns, ex-abkari contractors, ex-servicemen's associations, etc., are exempted in deserving cases from the conditions regarding the previous business standing.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

MADRAS FOODGRAINS (MOVEMENT CONTROL) ORDER, 1947

(*G.O. Ms. No. 720, Food, dated 14th June 1947.*)

This Order controls the movement of foodgrains from places within the State of Madras to places outside it by a system of permits created in certain cases and under certain conditions specified in the Order. Permits under

the Order are issued by the Commissioner of Civil Supplies, Madras. A week's ration at the prescribed scale forming part of the luggage of bona fide travellers and grains intended for bona fide sowing purposes granted under a certificate issued by an Officer of the Madras Agricultural Department not below the rank of District Agricultural Officer and foodgrains transported under Military Credit Notes are exempted from the operation of the Order.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

This Order has been extended to apply in the case of imports of foodgrains. A permit is necessary for the import of foodgrains into the State.

The Order has been amended exempting Defence Services personnel who go on leave to carry ration under the certificates issued by the Military authorities up to the quantities specified therein.

The Madras Foodgrains (Movement Control) Order, 1947, has been amended in G.O. Ms. No. 192, Food and Agriculture, dated August 6, 1952 due to the removal of the ban on the inter-state movement of Pearl barley powder and indigenous barley without hush. The Movement Control Order has also been amended in G.O. Ms. No. 1323, Food and Agriculture, dated August 13, 1952, as the ban on the inter-state movement of semolina and self-raising flour imported from foreign countries has been lifted and the price restrictions removed.

THE MADRAS FOODGRAINS (RESTRICTED PLEDGING WITH BANKS) ORDER, 1950

This Order has been reissued as the Madras Foodgrains (Restricted Pledging with Banks) Order, 1952 (G. O. Ms. No. 1485, Food and Agriculture, dated 15th September 1952).

This Order imposes certain restrictions on the pledging of the procured stocks of paddy and rice with banks by the procuring agents in the State.

THE MADRAS SUGAR DEALERS' LICENSING ORDER, 1951

This Order directs that wholesale dealers for sugar should be licensed and that licences either from the Commissioner of Civil Supplies or his nominee are necessary.

By amendments issued on 6th September 1952, sub-clause (c) of clause 6, clause 7 and condition 14 of the licence in Form II in the Schedule have been amended.

SUGAR PRICE CONTROL ORDERS

The Collectors have been empowered to fix the wholesale and retail prices of sugar.

THE MADRAS FLOUR (USE IN MAKING PASTE OR STARCH) PROHIBITION ORDER, 1947

This Order prohibits the use of flour for making paste or starch except under a permit issued by the City Rationing Officer, Madras, District Supply Officer, etc., or an authorisation given by the Government.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

ORDER RELATING TO THE RESTRICTIONS ON THE OUTPUT OF BRAN WHEN MILLING WHEAT

(*G.O. Ms. No.* 940, *Food, dated 22nd August* 1947.)

According to this Order, all flour mills situated within the State of Madras shall, when milling wheat, restrict the output of bran to five per cent of the whole wheat.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

MOVEMENTS OF MILLETS

According to this order, four zones have been formed in the State for the purpose of movement of locally grown millets, viz., Cholam, Cumbu, Ragi, Korra, Samai, Varigalu and Maize. These millets and their products cannot be transported from any place within a zone to any place outside it except under a permit issued by the Collector of the District concerned. (G. O. Ms. No. 1570, Food and Agriculture, dated 4th October 1952.)

PRICE CEILINGS OF BENGALGRAM

By a notification issued on 22nd July, 1952, by the Central Government, the maximum prices at which bengalgram, bengalgram dhall and besan may be bought or sold in the State of Rajasthan and the Rohtak and Hissar Districts in the State of Punjab, have been fixed (G.O. Ms. No. 1290, Food and Agriculture, dated 6th August 1952.)

LEVY PROCUREMENT ORDER, 1952

As envisaged at the time of introducing the decontrol policy in June 1952, the Madras Government have now proposed to build up a buffer stock of about 2½ lakh tons of rice for the coming year by an easy levy system. The Levy Procurement Order is accordingly being published in an extraordinary issue of the *Fort St. George Gazette.* The Order is applicable only to the surplus areas in the surplus districts of East Godavari, West Godavari, Krishna, Guntur and Tanjore. The main features of this scheme are—

(1) Persons owing five acres and less are exempted from levy.

(2) Those owning above five acres have been classified into various groups for purposes of levy and the scales of levy have been fixed. An initial slab of five acres in each of these groups is, however, exempted from levy.

(3) No person who is coming under the purview of the Order can sell any part of the foodgrains harvested from the lands to any person other than the District Collector or an agent appointed and notified by him in the District Gazette before surrendering in full the levy demand made from him.

THE FLOUR (USE IN SOAP MAKING) PROHIBITION ORDER, 1946

This Order was issued by the Government of India in their notification No. C. G. 602 (86) Department of Food, dated 1st February 1946, under the Defence of India Rules. This was republished by this Government in the *Fort St. George Gazette* in their G.O. No. 680,

Development, dated 9th February 1946. Though the Defence of India Rules are not now in force, it was considered that the Order continues to be in force under the Essential Supplies (Temporary Powers) Act, 1946:

According to the Order, no person shall use in the manufacture of soap the flour of any of the foodgrains specified below :—

1. Wheat and wheat products (including ata, maida, rava, suji and bran) Triticum inclusive of the different species.
2. Rice in the husk (paddy) (Oraysa Sataiva).
3. Rice husked (Orvza Sataiva)
4. Maize (Zea, mays)
5. Jowar (Sorghum vulgare).
6. Bajra (Pennisetum typhoides).
7. Gram, any variety (Cicer arietinum).
8. Barley (Hordenm).
9. Ragi or mandua (Eleusine coracana).
10. Rahar (Cajanus indicus).
11. Masur (Lens eseulenta or Ervum Lens).
12. Kodra (Kondan) (Paspolum Scrobiculatum).
13. Korra (Tenai) (Setaria italica).

PLYING OF BOATS OR OTHER FLOATING VESSELS UP THE RIVER GODAVARI BEYOND POLAVARAM TOWN IN THE WEST GODAVARI DISTRICT

According to the Order, the plying of any boat or other floating vessel up the river Godavari beyond Polavaram Town in West Godavari District during night between 7 p.m. and 7 a.m. is prohibited. The plying of the boats or other floating vessels during daytime, i.e., between 7 a.m. and 7 p.m. is permissible only after they are checked by the special permit issuing officer. (G.O. Ms. No. 1071, Food and Agriculture, dated 29th September 1947.)

PLYING OF BOATS OR FLOATING VESSELS ON THE KRISHNA AND TUNGABHADRA RIVERS

According to the Order, the plying of any boat or other floating vessels on the Krishna and Tungabhadra rivers within the limits of Kurnool District between 7 p.m. and 7 a.m. is prohibited. The plying of boats or other floating vessels during the time, i e., between 7 a.m. and 7 p.m. is permissible only after they are checked by the special permit issuing officer. (G.O. Ms. No. 1220, Food and Agriculture, dated 3rd November 1947.)

THE MADRAS RICE MILLS LICENSING ORDER, 1951

This Order extends to the whole of this State and came into force on 19th April, 1951. Under this Order, a licence from the District Collector is necessary for running a rice mill. Consequent on the revised food policy, the Government have ordered that it is not necessary to continue the ban on the installation of new rice mills and on the expansion of the existing rice mills anywhere in the State. The position at present in regard to rice mills is as it stood prior to 10th December 1949.

All rice mills, anywhere in the State, whether engaged in hulling Government stocks or hulling private paddy for cooly, are controlled by this Order. Licences issued under this Order have to be renewed year after year. A licence fee of Rs. 24 is levied for every licence and every renewal thereof. The licensee will have to deposit with the District Collector such sum as may be specified by the latter for due performance by the former of his duties as a licensee under this Order. The District Collector has power to order the forfeiture of the deposit mentioned above either in whole or in part, for breach of any of the provisions of this Order or any of the conditions of the licence, without prejudice to any other action that may be taken against the licensee. The Commissioner of Civil Supplies or any other officer authorised by him, can suspend or cancel the licence, for contravention of any of the provisions of the Order or any of the conditions of the licence.

SALT PRICE CONTROL ORDER, 1947

This Order specifies the maximum ex-factory wholesale price of salt per Imperial maund (exclusive of the cost of the gunny and cess) for each of the salt-producing districts of the State. The price varies between 12 annas to 15 annas per Imperial maund. The Collectors of the districts have been empowered by the Central Government to fix the wholesale and retail prices of salt for each consuming area, within their respective jurisdictions, subject to any directions issued by the State Government. The wholesale price fixed for each consuming area includes the ex-factory price, cost of the gunny, transport charges, handling charges and wholesaler's profits of 6½ per cent. The retail price for each consuming area is fixed suitably on the basis of wholesale price fixed for that area. No producer, wholesaler or retailer, should sell salt at a price exceeding the notified price. Failure to comply with any of the instructions will render a dealer punishable in a Court of Law.

Prosecutions for the infringement of the conditions of this Order should be launched only with the previous sanction of the Collector concerned.

DEVELOPMENT DEPARTMENT

THE COTTON CONTROL ORDER, 1950

This Order provides control over contracts relating to sale or purchase of cotton and over sale of cotton to specified persons at specified prices.

THE MADRAS DRUGS (CONTROL) ACT, 1949

In order to ensure that essential drugs continue to be sold at reasonable prices even after devaluation, the Madras Drugs Control Act 1949, was passed by the Government. The Act provides for the control of the sale, supply and distribution of drugs in the Madras State.

RURAL WELFARE DEPARTMENT

THE MADRAS KHADI (DEVELOPMENT) ORDER, 1949

The provisions of the Order prohibit a person to carry on business as a producer or dealer of hand-spun yarn and Khadi in the State of Madras except under and in accordance with the terms and conditions of a licence issued to him for the purpose.

Further, the Order states that no person who is a producer or a dealer in mill-made yarn or cloth woven out o

such mill-made yarn shall carry on the business of a producer or a dealer in hand-pound yarn or Khadi. No hawker shall be licensed to deal in hand-spun yarn or Khadi. The sale price of Khadi should not exceed the aggregate of the cost of production of the cloth plus 15⅝ per cent thereof.

PUBLIC DEPARTMENT

RESETTLEMENT OF RELEASED ARMY PERSONNEL

An Order, dated 12th April 1951, seeks to implement the Central Government suggestion that demobilised military personnel should be given every preference in all avenues of service. In every case where an ex-soldier is found *prima facie* suitable for employment under this Government, the relaxation of technical restrictions including age bar will be considered.

PUBLIC WORKS DEPARTMENT

THE MADRAS BUILDINGS (LEASE AND RENT CONTROL) ACT, 1949

This Act seeks to regulate the letting of residential and non-residential buildings and to control the rent for such buildings and to prevent unreasonable eviction of tenants therefrom in the State of Madras, and applies to the City of Madras, all Municipalities within the State, and such other areas as may be notified in the Gazette by the Government of Madras from time to time.

To remove certain practical difficulties which were experienced in administering the Act, the Act has been amended in certain respects. The amendments have come into force from May 1951. The important amendments that have been made have been explained in Press Note No. 71, P.W. (I. & P.), dated May 1951.

Whereas Section 6-B (1) of the Madras Buildings (Lease and Rent Control) Act, 1949, as amended by Act VIII of 1951, provides for the deposit of rent when the address of the landlord or local agent is not known and when the owner is under dispute, there is no provision in the Act to deposit the rents of buildings in cases where the addresses of the landlords are known but they refuse wilfully to receive the rent. Under Section 6-A (4) of the Act, the tenant is bound to continue to remit the rent to the landlord by money order after deducting the money order commission. But if the rent so remitted by money order is consistently refused by the landlord and the money thus returned to the tenant, it will accumulate in the hands of the tenant with the possible risk of his not being able to pay the amount in lump sum when demanded by the landlord. The Government who are the statutory tenants of the building are liable for payment of rent to the landlord. It is therefore, in the interest of the Government to see that the refused rent which is returned to the tenant is caused to be deposited by him so as to be available for payment to the landlord whenever he demands it. Therefore the amounts returned to the tenant on the refusal of the money orders should be caused to be deposited by the tenant to the credit of the Government in the Reserve Bank or the treasury under "Revenue Deposits."

By G. O. No. 1600, dated 16th June 1952, the following amendments have been issued to the Act:—I. In sub-rule (3) of Rule 6 of the words "at 8 annas" the words "at Re. 1 and annas 7" are substituted.

2. In sub-rule (2) of rule 22 for the words "a fee of annas eight" the words "a fee of Rupee one and annas seven" are substituted.

By an amendment issued in G.O. No. 146, Public (General) Department, dated January 24, 1952, the following note is added:

Note.—The Reserve Bank or the treasury will not receive the deposit unless the Controller or the appellate authority, as the case may be, or any person authorised by such Controller or appellate authority in this behalf, certifies on the chalan accompanying the deposit that the deposit may be received.

CEMENT CONTROL ORDER, 1949

This Order controls the sale of cement.

By an amendment issued on 3rd April 1951, licensed cement factories are authorised to sell up to one wagon load (not exceeding 25 tons) direct to each individual consumer without a permit, such sales not to exceed 20 per cent of their monthly production.

Another amendment issued on 3rd April 1951 requires licensees to submit particulars of such free sales of cement. Licensees shall not default in selling cement to permit holders.

Amendments issued to the Cement Control Order on 30th May 1951 provide that:

The price of all Portland cement produced in India, exclusive of the cost of containers, if any, shall not exceed Rs. 71 per ton; in full wagon loads f.o.r. destination.

The actual cost of gunny bags, subject to a maximum of Rs. 26 per ton of cement, if supplied wholly in new gunnies, may be charged, in addition to the price of the cement specified above.

The price leviable for the cost of packing for supplies in paper bags or old gunny bags, which may be settled between the purchaser and the supplier, shall not exceed Rs. 26 per ton of cement.

An amendment issued on 1st November 1951 provides further that an insurance fee of Re. 0-10-0 (annas ten) per ton may be collected by the supplier when the cement is despatched in open wagons with the concurrence of the purchaser.

Deposit of Advance Compensation

On behalf of the Government, the Director of Settlements, Madras, has deposited certain further amounts towards advance compensation with the Chairmen, Estate Abolition Tribunals, Chittoor and Vizianagaram, in respect of certain under-tenure estates, notified in the II batch and taken over on September 7, 1950. The names of the estates concerned, the amounts deposited, the date of transaction and the reasons for the same are published at pages 1230 and 1297 of Part II of the *Fort St. George Gazette*, dated 3rd September 1952 and 17th September 1952, respectively.

Goodwill Mission from Nigeria

The first Nigerian Goodwill Mission to India arrived in Madras on the morning of November 11, 1952, from Colombo, on the first lap of a two-week tour of India. The Mission, consisting of the Hon'ble Dr. Obafemi Awolowo and the Hon'ble Mr. Augustus Meredith Adisaw Akinloye, Ministers of the Nigerian Government, has planned to spend a fortnight in India, during the course of which it will visit Mysore, Delhi, Agra, Calcutta, Nagpur and Bombay. The Mission will study the electoral system in India, visit important scientific, educational and medical institutions, factories and agricultural centres.

The two Nigerian Ministers were received at the Meenambakkam Aerodrome by a large gathering of officials and non-officials. Dr. Awolowo, picturesquely robed in the costume of his country, received newsmen with a genial smile and told them: "We are delighted to come to India. We are particularly impressed by the spontaneous reception that has been given us on landing in Madras. The Indian Government has taken a very keen interest in our visit. We have been looking forward to our fourteen-day stay in India and we have no doubt that during our stay here we will have a very good time."

Visits to Institutions

Later the members of the Mission visited the Victoria Technical Institute, a State-sponsored cottage industries and handicrafts shop. They expressed high appreciation of the artistic skill exhibited in the workmanship. They then visited the Veterinary College.

The Mission visited the Madras University the same afternoon. The visitors were received by Dr. Lakshmanaswami Mudaliar, Vice-Chancellor, who took them round the various departments of the University. At the University Library, the Nigerian Ministers were delighted to find several books dealing with Nigerian history, politics and administration.

The visitors later came to the Madras Secretariat, where they were met by Sri C. Subramaniam, Minister for Finance, and other officials. In the evening the distinguished visitors addressed the Madras branch of the Indian Council of World Affairs at the Servants of India Society building. From there the Nigerian Ministers proceeded to Adyar, where they went round the Theosophical Society, and saw young trainees being put through their steps at the famed art centre Kalakshetra.

On November 12, 1952, Dr. Awolowo met the Inspector of Municipal Councils and the Additional Secretary to Government, Public Department. Mr. Akinloye met the Director of Agriculture and other officials. The Ministers then visited the Simpson Farm and the Standard Motor Assembly Factory at Vandalur. After attending a luncheon party given by the Deputy High Commissioner for the United Kingdom, the visitors motored to Mahabalipuram, to see the famous rock sculptures and stone chariots of the Pallava Age.

Nigeria

Nigeria is one of the four West African British territories. The population is about three crores. It has advanced politically very rapidly and at present m[illegible] compared to the position India occupied in 193[illegible] Constitution is federal, and there are three [illegible] Western, the Northern and the Eastern. T[illegible] legislature for the State as well as for the Fe[illegible] There is a Governor for the entire country, w[illegible] Lieutenant-Governors for the three units. Eac[illegible] has its own Legislature and Executive Council [illegible] Centre is the House of Representatives whose r[illegible] are elected by the regional legislatures. The Executive Council decides the overall policy for [illegible] This Council consists of the Governor as President, ex-officio Members and 12 Central Ministers (four fr[illegible] each region).

West Africans have a great regard for India, and [illegible] Nigerians greatly admire Mahatma Gandhi and Jawaha[illegible] Nehru. They would like to know how India achie[illegible] her freedom through non-violence, and they are anx[illegible] to see how elections are conducted in India, especi[illegible] with a large illiterate population in the electorate. N[illegible]rians are also interested in our Community Projec[illegible]

Nigeria is an exporter of very important raw pro[illegible] like groundnuts and cocoa, and the country is consi[illegible] to possess rich, untapped sources of mineral wea[illegible]

The Two Ministers

Obafemi Awolowo.—Dr. Awolowo was born on [illegible] 6, 1909, in a small town in Nigeria. After finishi[illegible] school education he worked in various capacities [illegible] teacher, a shorthand typist in a firm, as a reporte[illegible] a daily paper and as a businessman. After taking [illegible] B.Com. degree in 1944, he left for the United King[illegible] to study law, and was called to the Bar in November [illegible]

Dr. Awolowo is the founder and first President o[illegible] Action Group, the party now in power in the We[illegible] Region of Nigeria. The Action Group was founde[illegible] March 1950, and publicly inaugurated in April 1[illegible] Dr. Awolowo is also actively connected with the T[illegible] Union movement and was one of the founders of the Tr[illegible] Union Congress of Nigeria and the first Secretary-Edit[illegible] of the *Nigerian Worker*. In January 1952 he becam[illegible] Minister for Local Government. He is the author [illegible] *Path to Nigerian Freedom*, published in 1947. He has al[illegible] translated Pandit Nehru's *Autobiography* in the languag[illegible] of his country, and published it as a serial in his new[illegible]paper.

Augustus Meredith Adisaw Akinloye.—Mr. [illegible]kinlo[illegible] was born on August 19, 1918, at Ibadan, Nigeria. H[illegible] was educated at the Ibadan Grammar School and work[illegible] in the Medical Department in Nigeria till 1945, when [illegible] proceeded to the United Kingdom to study law. [illegible] qualifying in law, he returned to Nigeria in 1950 an[illegible] up practice at Ibadan.

He formed the Ibadan People's Party in 1950 a[illegible] its first President. The Party is strongly affiliated [illegible] Action Group. He is also one of the foundation m[illegible] of the Action Group. He is a member of the [illegible] Group Working Committee, and is the Minister o[illegible] culture and Natural Resources, Western Region.

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